REVISION 3

INSERVICE INSPECTION AND TESTING

PROGRAM PLAN

FIRST TEN-YEAR INSPECTION INTERVAL

DIABLO CANYON POWER PLANT

UNIT 1

USNRC DOCKET NO. 50-275

FACILITY OPERATING LICENSE NO. DPR-80

COMMERCIAL OPERATION DATE: MAY 7, 1985

ISI Prepared by: _____
J. E. Hill ISI/NDE Lead Specialist

IST Prepared by: In Course Of Preparation

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

Approved by: _____ 2/13/86
R. C. Thornberry Plant Manager

CONTROLLED COPY NO. 30

DISTRIBUTION: This program plan is distributed by the Assistant Plant Manager for Technical Services, Diablo Canyon Power Plant. The Program Plan should be readily available for use by individuals having responsibility for scheduling and conduct of examinations, tests and audits. It is submitted to the Aurhorized Inspection Agency, State of California Division of Industrial Safety and the United States Nuclear Regulatory Commission. All copies are kept current by issuance of periodic changes which are subject to regulatory review.

8604210122 860414
PDR ADOCK 05000275
Q PDR

69-10996-1 4/85 (100)

Program Plan Change No 3

Date February 13, 1986

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

Change to Diablo Canyon Unit 1
Inservice Inspection And Testing
Program Plan

TO: Holders of Diablo Canyon Unit 1 Inservice Inspection And Testing Program Plan.

The following changes have been made to the Diablo Canyon Unit 1 Inservice Inspection and Testing Program Plan:

CHANGES	CHANGE INSTRUCTIONS
Revision 3 is a complete reissue. It contains numerous editorial and typographical corrections plus substantive changes as detailed on the next page. Change bars were not added since they were so numerous that they would have been confusing.	All previous issues plus revisions of the Unit 1 Program Plan are obsolete. Remove all internals plus front cover and spine pages from the old binders and discard contents. Do the same for any other uncontrolled copies within your purview.

After revising your copy of the Program Plan in accordance with these instructions, place this sheet in the front of the manual behind the controlled copy numbered title page. Please sign and date the receipt letter and return to DCPP Document Control. For questions or assistance please phone the Document Control office, PGandE extension 69-3500, Pacific Bell phone (805) 541-7500.

COPYHOLDERS:

This Revision 3 of the Diablo Canyon Unit 1 Inservice Inspection Program Plan is issued as a controlled document, superceding all previous revisions. The initial issue was distributed to a list of copyholders, but was not administered as a controlled document. Additional material on the IST Program was distributed to copyholders of record on May 10, 1983 (Revision 1) and October 19, 1984 (Revision 2), however these were not properly controlled revisions. Recognizing the need for procedural control of the Program Plan, PGandE developed Administrative Procedure AP E4-S7 which was approved July 19, 1984. Revision 3 is a complete reissue of the ISI Program controlled in accordance with PGandE AP E4S-7. The IST Program will follow as a controlled revision to this document. Editorial and typographical corrections have been made throughout the document. Revision 3 incorporates the following substantive changes from previous issues:

1. Controlled copy pages.

2. Updated ISI boundary drawings (PGandE No. 102028).

3. Table 1.2 - Deleted reference to Category B-D, not applicable to Diablo Canyon.

4. Table 1.3 - Corrected channel head weld numbers, deleted reference to Category B-D, not applicable to Diablo Canyon.

5. Table 1.4 - Corrected line number for PCV-455C to 1172 (p.20). Corrected weld number WIB-159A. Corrected certain weld totals. Updated hanger section to reflect Seismic Reverification Program modifications.

6. Table 1.6 - Corrected totals of pressure retaining bolts on certain valves. Corrected NDE method to VT-1 on pages 16 and 17.

7. Table 2.1 - Corrected reference from "Relief 011" to Relief 006. Corrected weld ID numbers on Regenerative Heat Exchanger.

8. Table 2.2 - Corrected certain weld totals. Net change: One weld added to Program on line 734 (page 11). Updated hanger section to reflect Seismic Reverification Program modifications.

9. Table 3.2 - Updated to reflect Seismic Reverification Program modifications.

10. NDE Relief Requests - Added requests NDE-011 and REP-001.

11. IST Pump Program - In Course of Preparation.

12. IST Valve Program - In Course Of Preparation.

DIABLO CANYON POWER PLANT
UNIT 1

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

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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 1 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 utilizes 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 will be scheduled to begin when the Unit is placed in commercial operation.

Where conformance with certain code requirements is impractical, requests for relief[2] are included in each 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 Table IWC-2520, Category C-F and C-G and paragraph IWC-2411 of the 1974 Edition through Summer 1975 Addenda of Section XI (10CFR50.55a(b)(2)(iv)(B)). 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, a repair program shall be developed as appropriate in accordance with the requirements of Article IWA-4000 of Section XI.



ASME SECTION XI CODE BOUNDARY DRAWINGS

This section contains the ASME Code Classification Boundary Drawings, PGandE Number102028. 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 are shown. 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 into 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

This section sets forth the Nondestructive Examination Program Plan for Diablo Canyon Unit 1. 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.

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.

The NDE section is divided in five parts. The first three cover ASME Code Class 1, 2 and 3 components, the fourth covers requests for relief for all Code Classes where it has been determined that a Code requirement is impractical and the fifth covers the listing of NDE calibration standards. In each of the first two parts, the tables identify the Code Class, Code Category, Code Item Number, name of the component or system, general identification and total number of items in the system.

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[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)

The general identification 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 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 Part 4 of this section.

In the third part, each Class 3 system and component is identified, along with its location on drawing 102028 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 the fourth part, requests for relief are presented. The tables identify the component or item, Code Class, program table (reference Parts 1, 2, and 3 of this section), 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.

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

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

Augmented examinations, if required by NRC[9], are normally included as provisions in the plant Technical Specifications. Examples include examinations required for the reactor coolant pump flywheels, steam generator tubes and the mechanical and hydraulic snubbers. Each reactor coolant pump flywheel will be inspected in accordance with Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975. In addition to the requirements of Section XI, eddy current testing of the steam generators tubes and the visual inspection and functional test of the snubbers will be conducted to meet the requirements of the plant Technical Specifications. These examinations, however, are not included in this ISI Program Plan. They will be conducted in accordance with plans and procedures which meet the requirements of the Technical Specifications.

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[9]Pursuant to 10CFR50.55 a(g)(6)(ii)

INSERVICE INSPECTION PROGRAM

System Pressure Tests

This section sets forth the System Pressure Test Program Plan for Diablo Canyon Unit 1. 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.

This section consists of four parts --- pressure tests for Code Class 1, 2 and 3 systems and the request for relief where pressure test is impractical. It is presented in tabular format. It shows the component or piping system description, the drawing sheet number of the Code classification drawing (Dwg. 102028), identifies the applicable Section XI pressure test requirement, the required test pressure, test frequency and any amplifying remarks for the pressure test. Each system code class has its own tab.

INSERVICE TESTING OF PUMPS AND VALVES

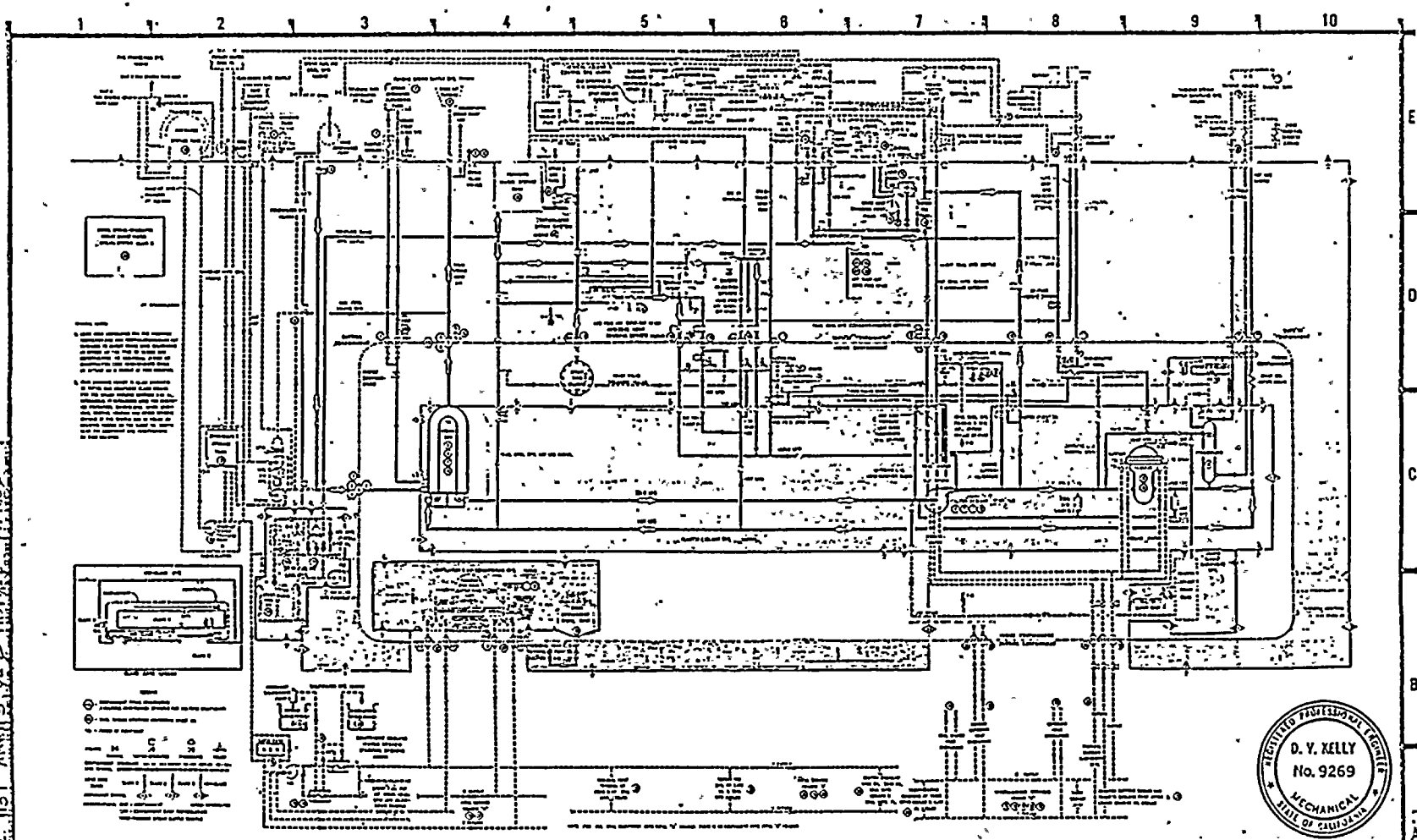
The pump and valve program demonstrates the operational readiness of Code Class 1, 2 and 3 pumps and valves which are required to perform a specific function in shutting down the reactor or in mitigating the consequences of an accident. This program is presented in a table format with line entries for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

The tabular format for the 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. Request for relief from Code requirements is also presented in table format with its own tab.

The tabular format for the valve IST program includes the valve number, valve description, 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), valve position, test requirement, applicable stroke time and the test frequency. Request for relief from Code requirement is also presented in table format having its own tab.

The pump and valve IST program becomes effective with the issuance of the operating license for the Unit.

RM INDEXED REV. 13



RM INDEXED REV. ..... UNIT 1 COAST VALLEYS DIVISION

REGISTERED PROFESSIONAL ENGINEER D. V. KELLY No. 9269 MECHANICAL STATE OF CALIFORNIA

NO.	DATE	DESCRIPTION	SUPV	DM	BY	CH.	APRD. LEAD CNGR
13	7-17-84	SEE TABLE OF CHANGES, SHEET 44	DSM/jh	167027	JZB	LIT	
12	5-10-84	SEE TABLE OF CHANGES, SHEET 42	TDO	167027	JZB	LIT	
9	11-21-84	SEE TABLE OF CHANGES, SHEET 41	TDO	167027		JZB	
13	12-20-84	REVISED SH. 33 PER DCI-EM-931IR1, SEE SH 44	WJO	167027		JZB	
12	8-10-84	REVD. PER DCI-EM-333B, R2; SEE SH. 33 FOR DET.	WJO	167027	VNM	JZB	
1	5-25-72	APPROVED FOR CONSTRUCTION.	—	167027	L.P.B.	H66	

TABLE OF CHANGES

APPROVED BY	
GM 167027	
SUPERV. ELEC. ENGR.	
DSGN. M.C. GUZMAN	
DR. SIM/COM/LIT	
CH. E.M. VALERIANO	
O.K. WWO/ IFH	
DATE 3-10-71	
SCALE NONE	

ASME CODE BOUNDARIES FOR INSERVICE INSPECTION AND TESTING PROGRAM

DIABLO CANYON
DEPARTMENT OF ENGINEERING
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA

BILL OF MATERIAL	
DRAWING LIST 050052	
SUPERSEDES	
SUPERSEDED BY	
SHEET NO. 1 OF 44 SHEETS	
DRAWING NUMBER	CHANGE
102028	13

PARTIAL ISSUE

CHANGE NUMBER & ENGINEE

APPRL BY ENGR.													
PIPING													
INSTRUMENT													
SYSTEM													
	12	9	13	12	10	9	13	11	10	9	13	11	12

PARTIAL ISSUE

35 MM FILM NEG. 1-A

20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29

SYMBOL

LINE	DESCRIPTION	BOUNDARY
	ASME CLASSIFICATION FOR INSERVICE INSPECTION AND TESTING	
	CLASS 1	1
	CLASS 2	2
	CLASS 3	3
GHOSTED LINES	NON-SAFETY RELATED SYSTEMS	4
GHOSTED LINES	INSTRUMENTATION	

LINE INTERFACE TO OTHER SHEET (THIS DWG.)
203-0 — SHEET VERTICAL CO-ORDINATE (IN ALPHABET) / SHEET HORIZONTAL CO-ORDINATE (IN NUMBER)

GENERAL NOTES

1. THESE DRAWINGS ARE INTENDED FOR USE IN IMPLEMENTING ASME SECTION XI INSERVICE INSPECTION AND TESTING REQUIREMENTS ONLY. THEY HAVE NO RELEVANCE TO THE DESIGN AND CONSTRUCTION OF THE COMPONENTS.
2. SYSTEM IN GHOSTED LINE ARE SHOWN FOR INFORMATION ONLY FOR SPECIFIC DETAILS IN THOSE SYSTEM SEE CORRESPONDING REFERENCE SCHEMATIC DWG. & SHEET NO. ON THE RIGHT SIDE OF THIS DWG.
3. NDE EXEMPTION COLOR CODING IS ADDED AFTER DRAWING APPROVAL. THE LEGEND FOR COLOR CODING IS CONTAINED ON SHEET 38.

INDEX

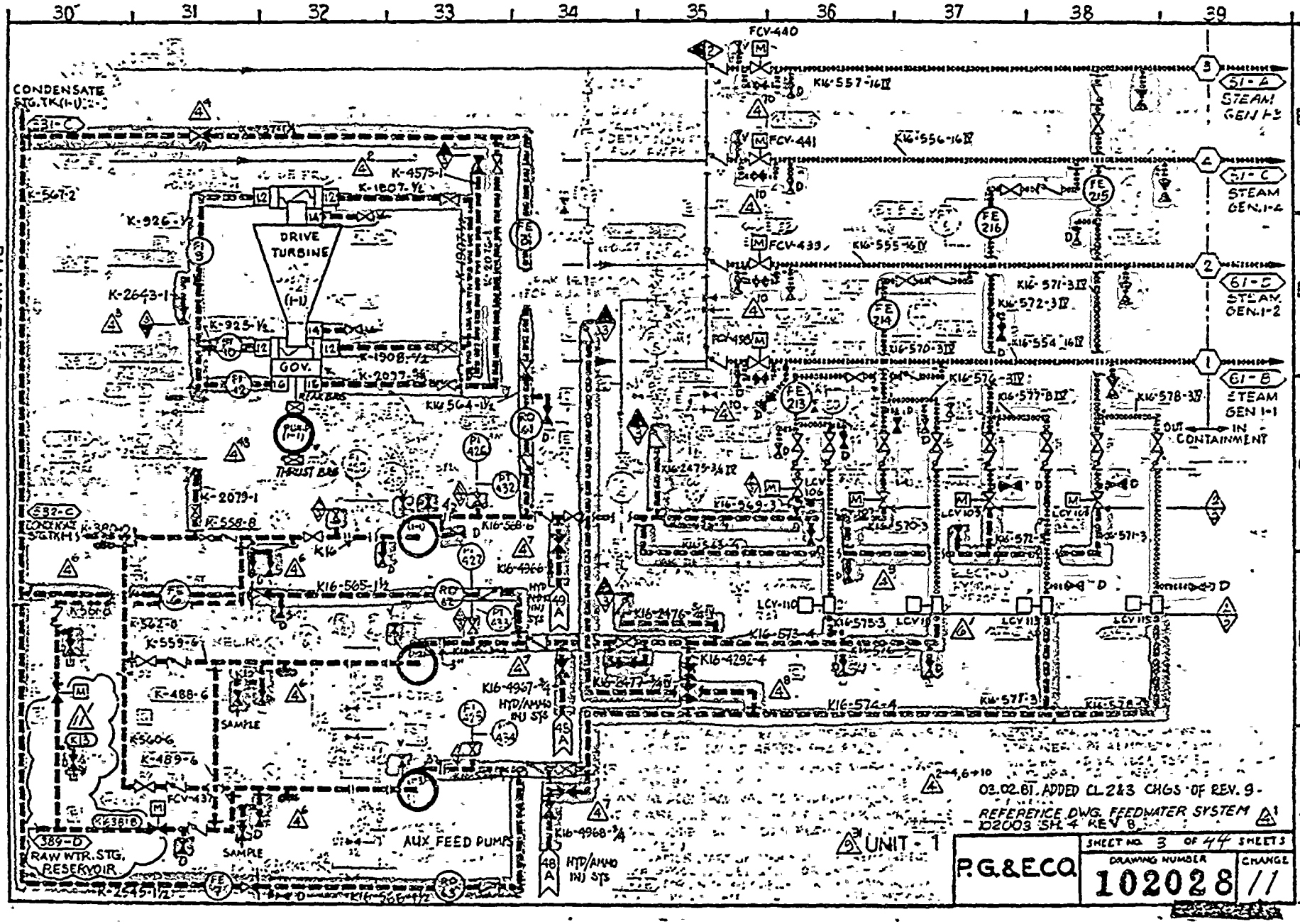
SYSTEM DESCRIPTION	SHEET NO. (THIS DWG.)	PIPING SCHEMATIC REFERENCE DWG. NO.	PIPING SCHEMATIC REFERENCE SHEET NO.
FEEDWATER	3, 4	102003	4, 4A
TURBINE STEAM	5, 6, 7	102004	3, 5, 7
REACTOR COOLANT	8, 9, 10, 11	102007	3, 7, 4, 5
CHEM & VOLUME CONTROL	12, 13, 14, 15, 16	102008	3, 4, 4B, 5B, 8
SAFETY INJECTION	17, 18, 19	102009	3, 4, 5
RESIDUAL HEAT REMOVAL	20, 21	102010	3, 4
NUCLEAR STEAM SUPPLY SAMPLING	22	102011	2
CONTAINMENT SPRAY	23	102012	3
SPENT FUEL PIT COOLING	24	102013	2
COMPONENT COOL. WTR.	25, 26, 27, 28, 29, 30, 31, 32	102014	5, 5A, 6, 6A, 7, 8, 9, 10
MAKE-UP WATER	33, 34	102016	7, 8
SALTWATER (CIRC. WTR.)	35	102017	3
FIRE PROTECTION	36	102018	3
DIESEL ENGINE-GEN.	37	102021	8
MAKE-UP WATER 3,4 (11)	38, 39	102016	5A, 5B

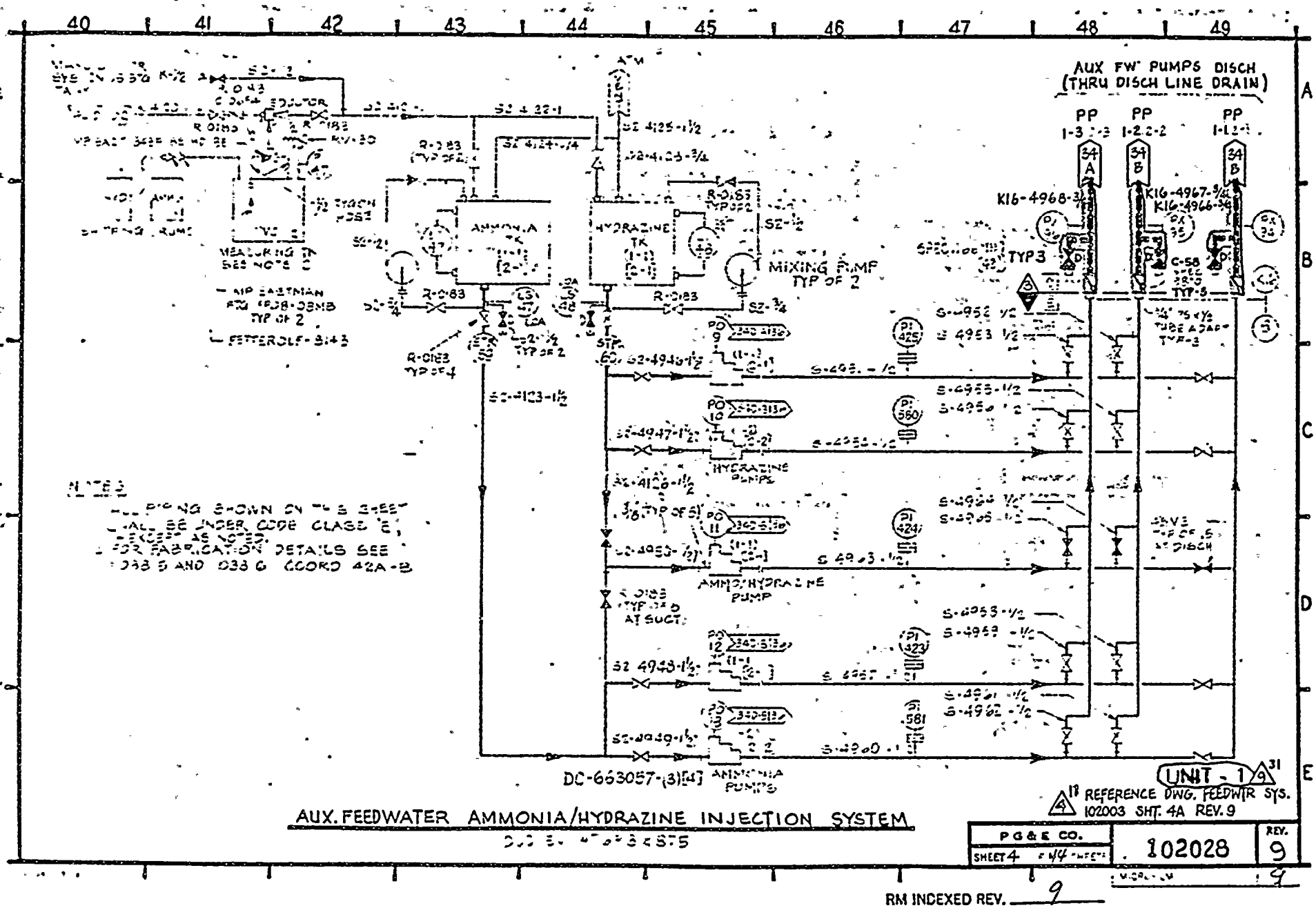
UNIT - 1

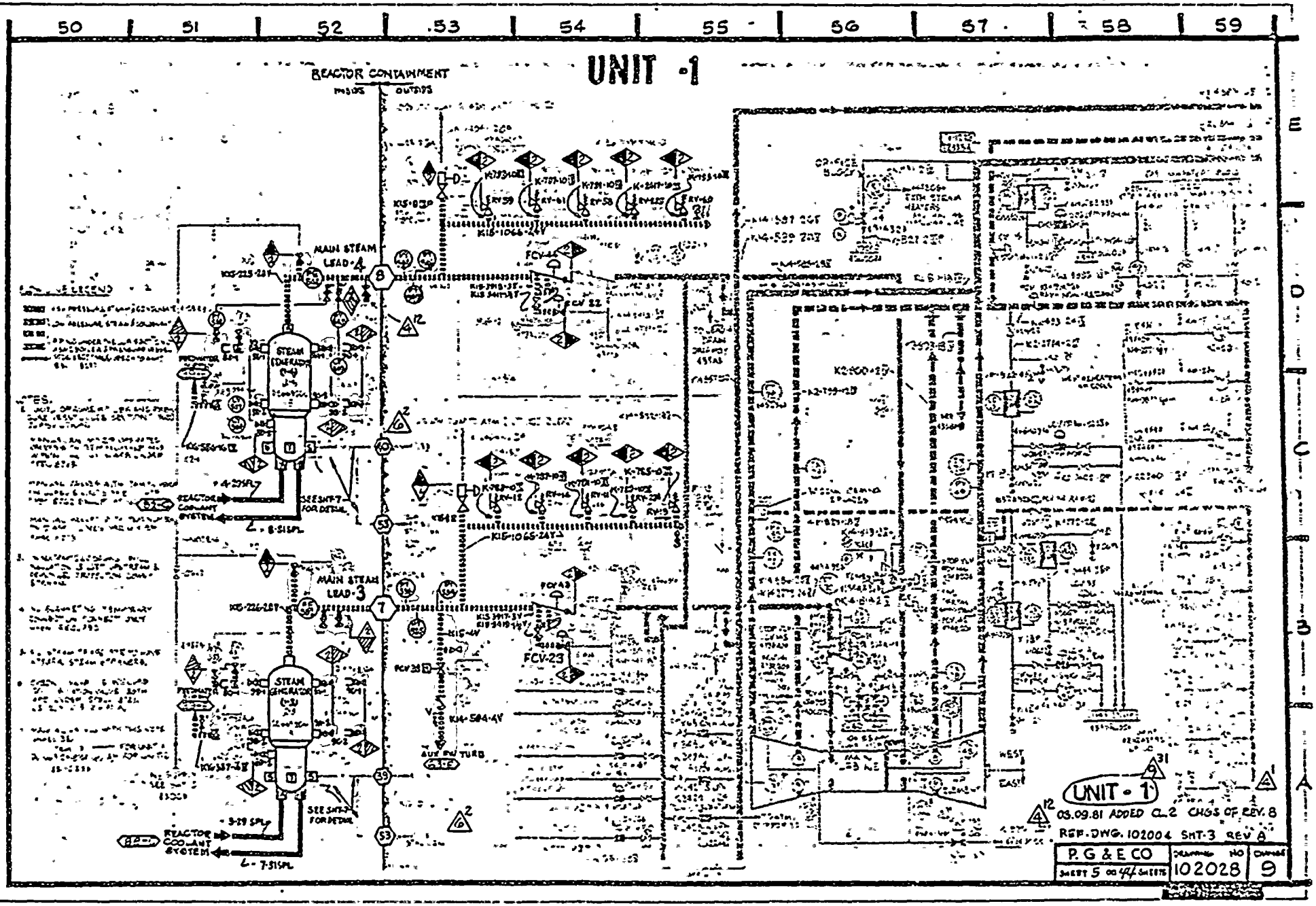
PG&E CO. | SHEET 2 OF 44 SHEETS | 102028 | REV. 11

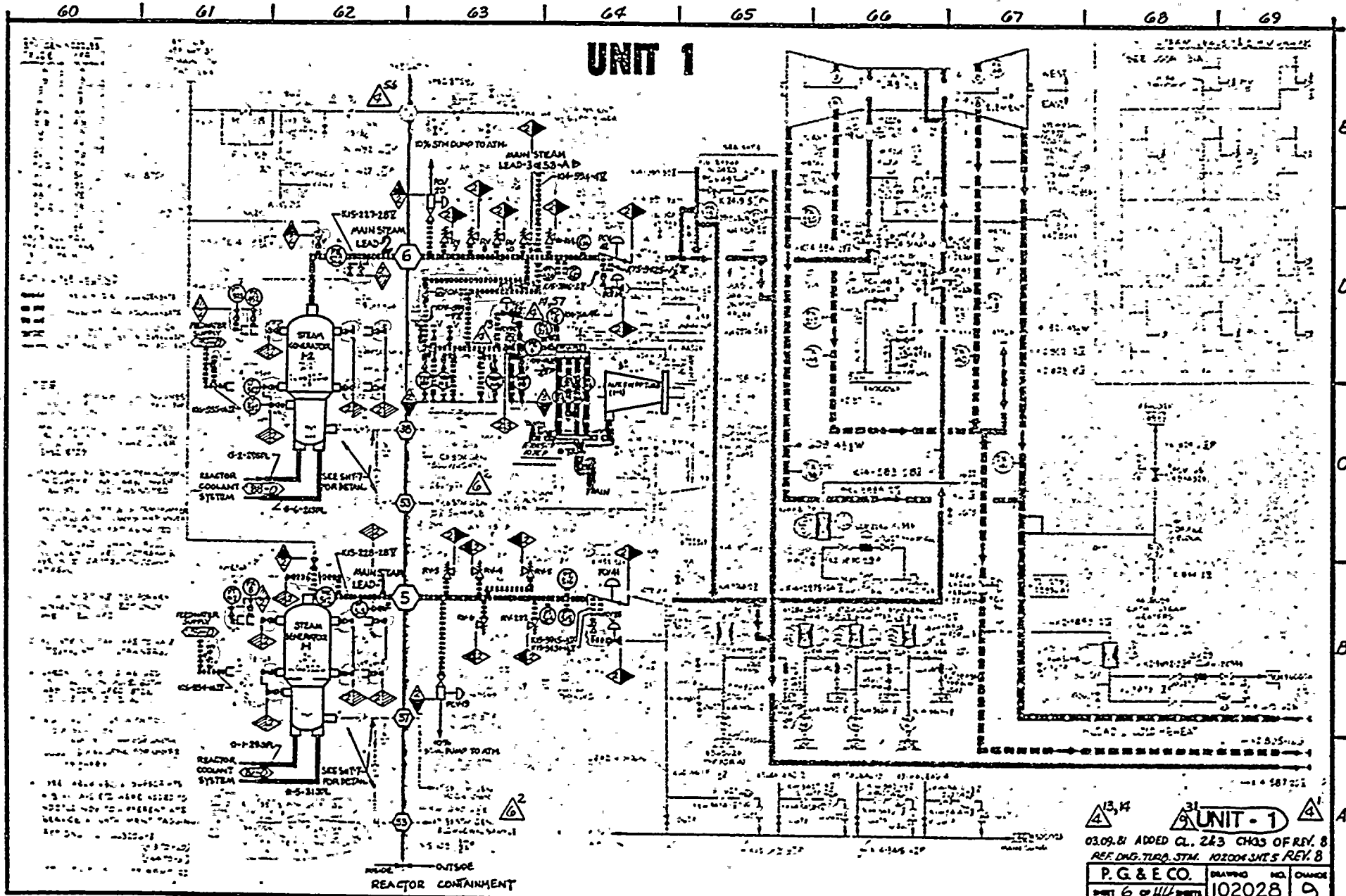
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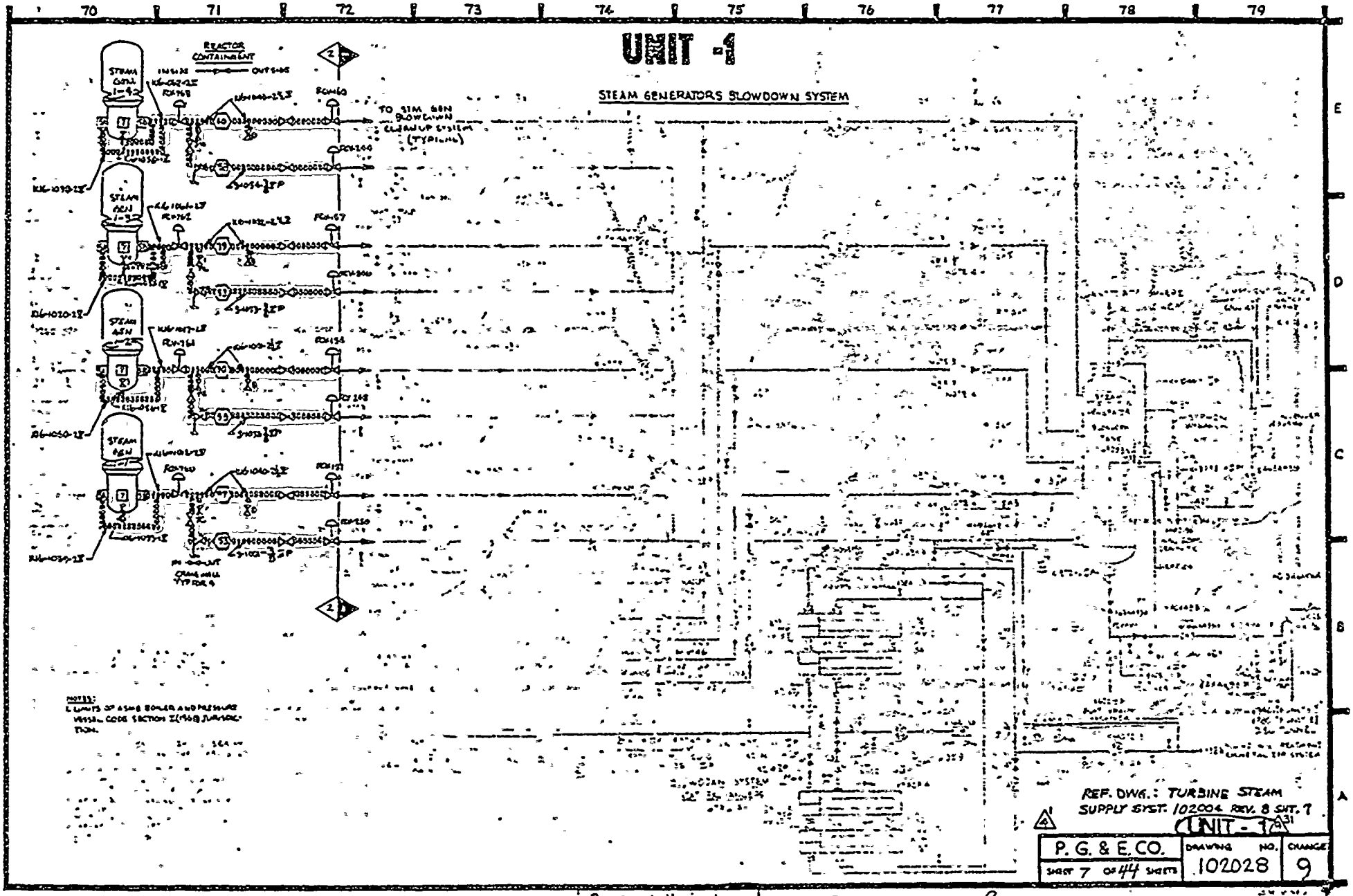
INDEXED REV. 11

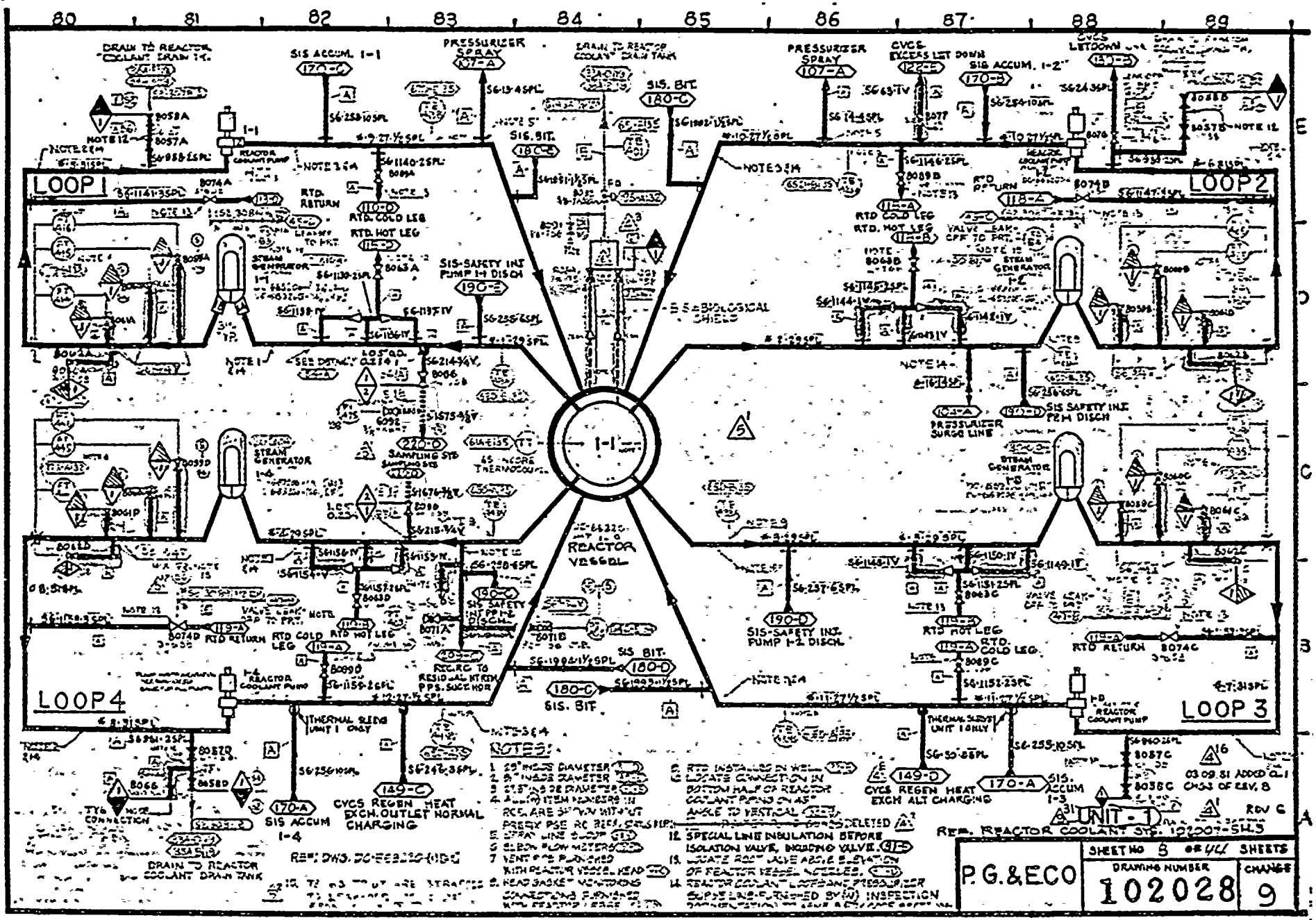

30
31
32
33
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36
37
38
39
CONDENSATE STG. TK. (1-1)
DRIVE TURBINE (1-1)
GOV.
PUMP (1-1)
THRUST BAR
AUX FEED PUMP
RAW WTR. STG. RESERVOIR
SAMPLE
FCV-440
FCV-441
FCV-439
FCV-438
FCV-437
K-4575-1
K-1807-½
K-926-½
K-2643-1
K-925-½
K-1908-½
K-2077-3/4
K16-564-1½
K-2079-1
K-558-8
K16-565-1½
K16-4966-2
K16-4967-¾
K16-4968-¾
K-559-6
K-468-6
K-560-6
K-489-6
K-2545-1½
K16-557-16"
K16-556-16"
K16-555-16"
K16-554-16"
K16-571-3"
K16-572-3"
K16-570-3"
K16-576-3"
K16-577-8"
K16-578-3"
K16-2475-3/4"
K16-969-3
K16-573-4
K16-4292-4
K16-574-4
K16-575-3
K16-576-4
K16-577-3
K16-578-3
LCV 106
LCV 109
LCV 110
LCV 113
LCV 114
LCV 115
FE 213
FE 214
FE 215
FE 216
PI 426
PI 427
PI 432
PI 433
PI 434
HTD/AMMO INJ SYS
51-A STEAM GEN 1-3
51-C STEAM GEN 1-4
61-C STEAM GEN 1-2
61-B STEAM GEN 1-1
OUT CONTAINMENT
IN CONTAINMENT
02.02.81 ADDED CL 2&3 CHGS OF REV. 9
REFERENCE DWG. FEEDWATER SYSTEM 102003 SH. 4 REV 8
UNIT - 1
P.G.&E.CO.
SHEET NO. 3 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 11
RM INDEXED REV 11
35 MM FILED

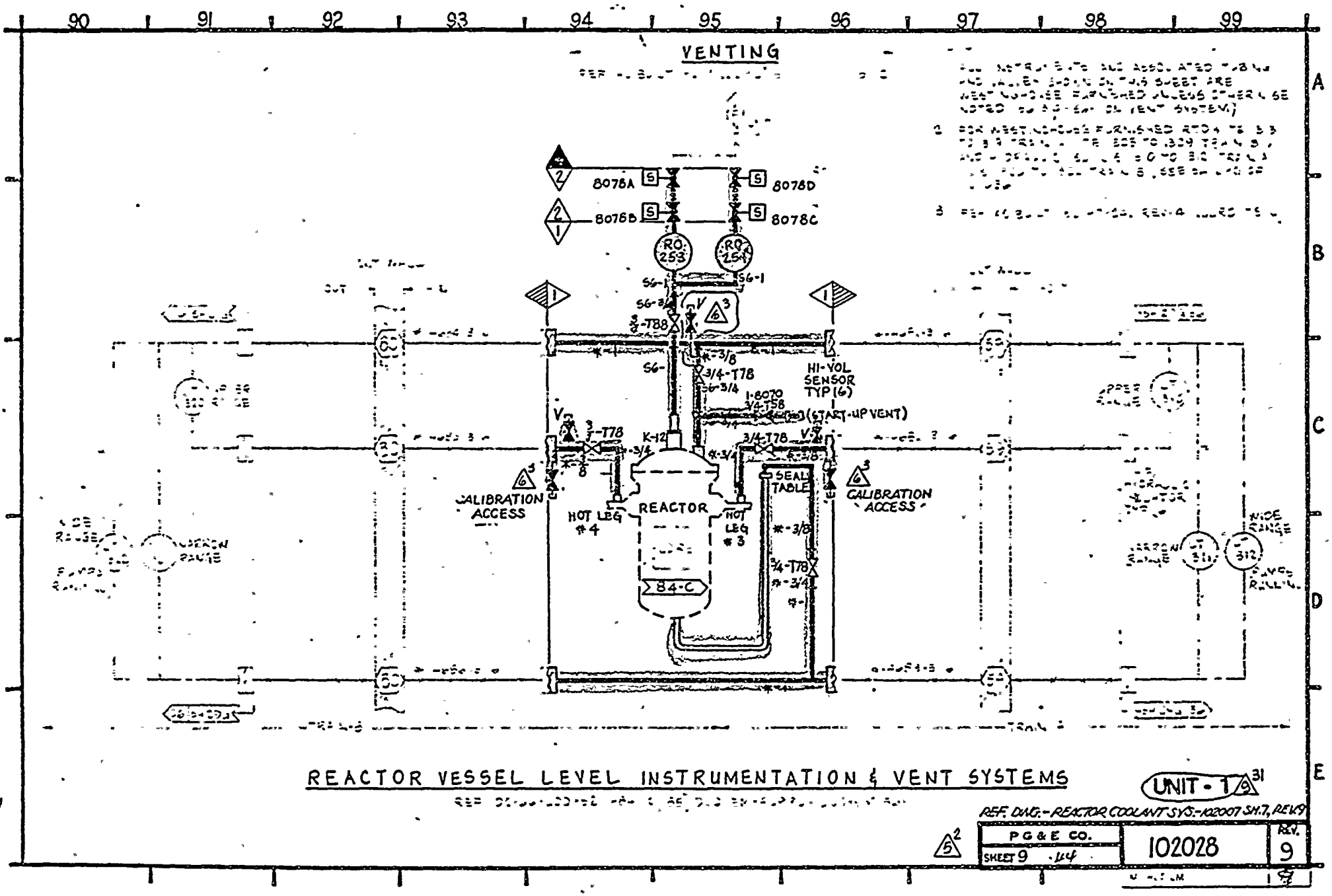

AUX FW PUMPS DISCH
(THRU DISCH LINE DRAIN)
AMMONIA TK
HYDRAZINE TK
MIXING PUMP
TYP OF 2
HYDRAZINE PUMPS
AMMONIA/HYDRAZINE PUMP
AMMONIA PUMPS
DC-663057-(3)[4]
NOTES:
ALL PIPING SHOWN ON THIS SHEET
SHALL BE UNDER CODE CLASS 'E',
EXCEPT AS NOTED.
FOR FABRICATION DETAILS SEE
D38 5 AND D38 6 COORD 42A-B
UNIT - 1
REFERENCE DWG. FEEDWTR SYS.
102003 SHT. 4A REV. 9
AUX. FEEDWATER AMMONIA/HYDRAZINE INJECTION SYSTEM
PG&E CO.
SHEET 4
102028
REV. 9
RM INDEXED REV. 9

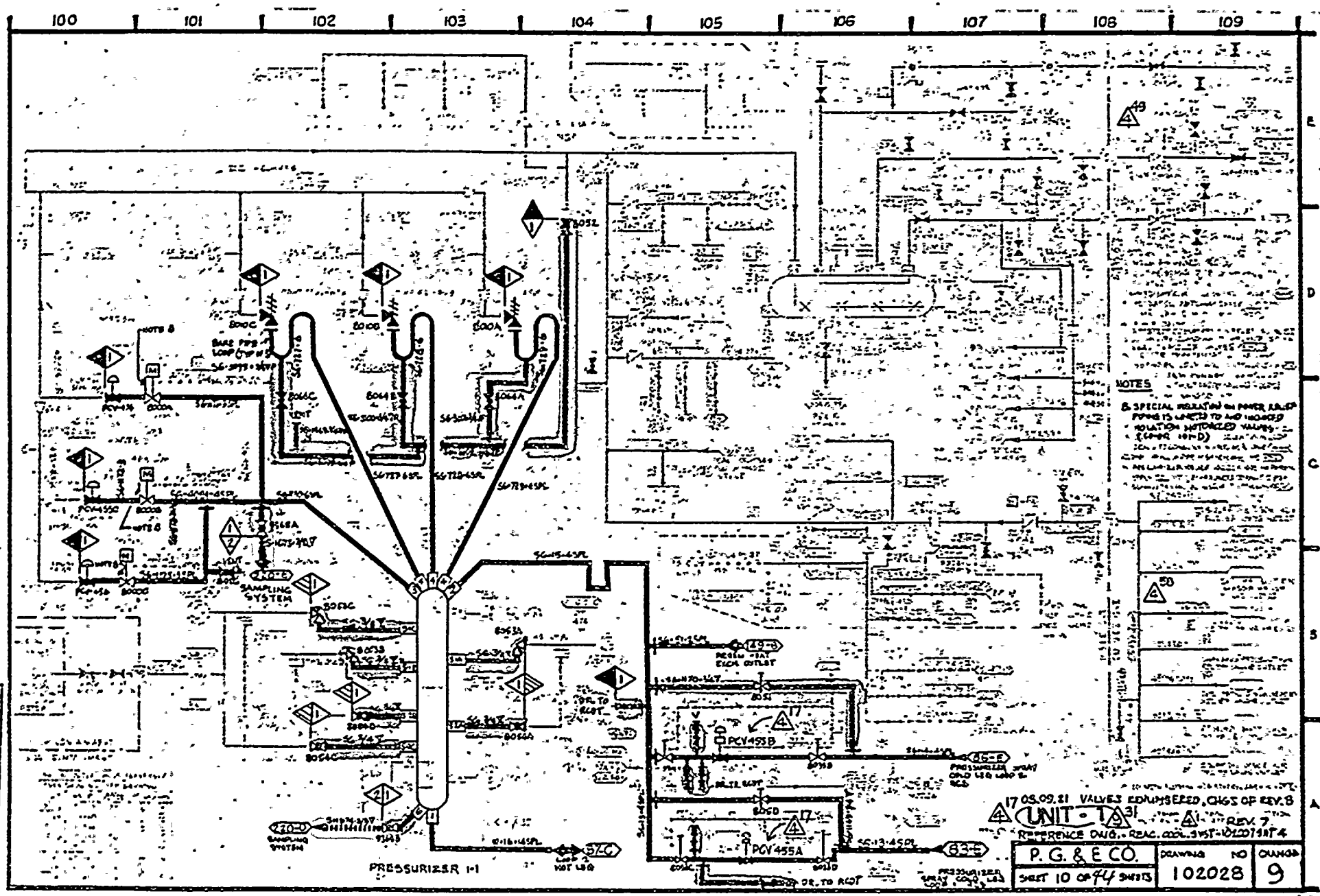

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UNIT -1
REACTOR CONTAINMENT
INSIDE
OUTSIDE
MAIN STEAM LEAD-4
MAIN STEAM LEAD-3
STEAM GENERATOR
FCV-23
REACTOR COOLANT SYSTEM
SEE SHT-7 FOR DETAIL
UNIT - 1
03.09.81 ADDED CL 2 CHGS OF REV. 8
REF. DWG. 102004 SHT-3 REV 8
P.G & E CO
SHEET 5 OF 9 SHEETS
DRAWING NO 102028
CHANGE 9
RM INDEXED REV. 9
35 MM NEG


UNIT 1
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62
63
64
65
66
67
68
69
E
D
C
B
A
MAIN STEAM LEAD-3
MAIN STEAM LEAD-2
MAIN STEAM LEAD-1
10% STM DUMP TO ATM.
STEAM GENERATOR M2
STEAM GENERATOR M1
REACTOR COOLANT SYSTEM
SEE SHT 7 FOR DETAIL
REACTOR CONTAINMENT
OUTSIDE
UNIT - 1
03.09.81 ADDED CL. 2&3 CH33 OF REV. 8
REF. DWG. TURB. STM. 102004 SHT 5 REV. 8
P. G. & E CO.
SHEET 6 OF 44 SHEETS
DRAWING NO. 102028
CHANGE 9
RM [illegible] REV. 9


UNIT -1
STEAM GENERATORS BLOWDOWN SYSTEM
REACTOR CONTAINMENT
INSIDE
OUTSIDE
TO STM GEN BLOWDOWN CLEANUP SYSTEM (TYPICAL)
STEAM GEN 1-4
STEAM GEN 1-3
STEAM GEN 1-2
STEAM GEN 1-1
70
71
72
73
74
75
76
77
78
79
E
D
C
B
A
NOTES:
1. LIMITS OF ASME BOILER AND PRESSURE VESSEL CODE SECTION III (1968 EDITION).
REF. DWG.: TURBINE STEAM SUPPLY SYST. 102004 REV. 8 SHT. 7
UNIT - 1
P. G. & E. CO.
DRAWING NO. 102028
CHANGE 9
SHEET 7 OF 44 SHEETS
RM INDEXED REV. 9

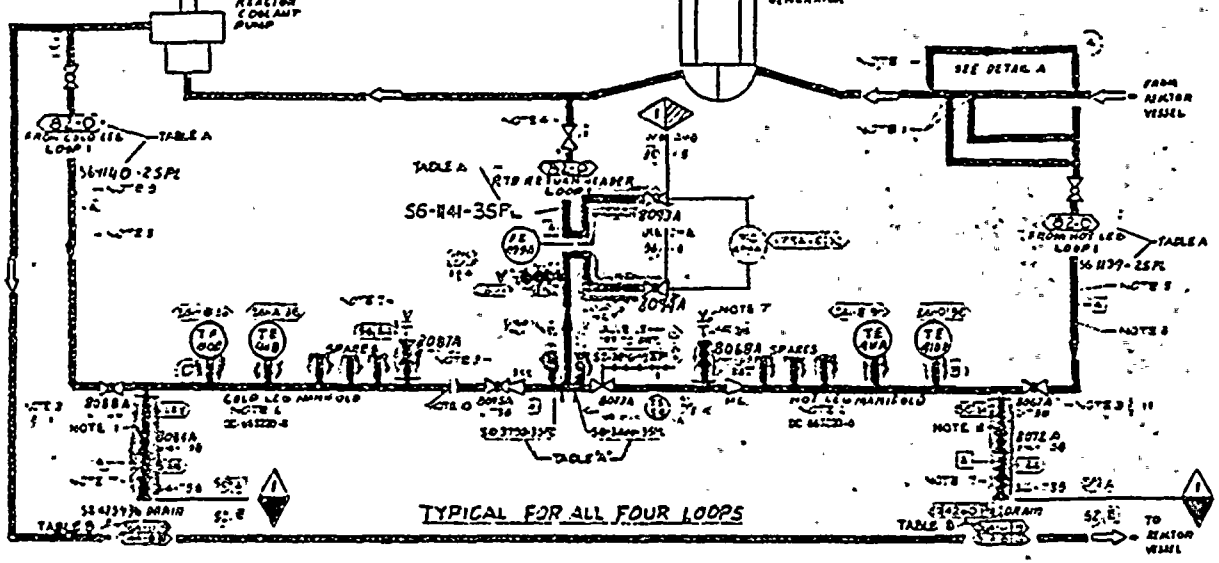

LOOP 1
LOOP 2
LOOP 3
LOOP 4
REACTOR VESSEL
1-1
DRAIN TO REACTOR COOLANT DRAIN TK.
SIS ACCUM. 1-1
PRESSURIZER SPRAY
SIS. BIT.
PRESSURIZER SPRAY
CVCS LETDOWN
SIS ACCUM. 1-2
RTD. RETURN
RTD. COLD LEG
RTD. HOT LEG
SIS-SAFETY INJ PUMP 1-1 DISCH
SIS-SAFETY INJ PUMP 1-2 DISCH
SIS SAFETY INJ FROM DISCH
PRESSURIZER SURGE LINE
STEAM GENERATOR
SAMPLING SYS
REACTOR COOLANT PUMP
THERMAL SLEEVE UNIT 1 ONLY
CVCS REGEN HEAT EXCH. OUTLET NORMAL CHARGING
CVCS REGEN HEAT EXCH ALT CHARGING
SIS ACCUM 1-4
SIS ACCUM 1-3
UNIT - 1
REM. REACTOR COOLANT SYS. 102007-SH.5
NOTES:
1. 29" INSIDE DIAMETER
2. 9" INSIDE DIAMETER
3. 21.5" INSIDE DIAMETER
4. ALL (#) ITEM NUMBERS IN RCS ARE SHOWN WITHOUT PREFIX PSE RC BEG. SERIES
5. SPRAY LINE SLOOP
6. ELBOW FLOW METERS
7. VENT PIPE PLUGGED WITH REACTOR VESSEL HEAD
8. HEAD GASKET MONITORING CONNECTION & FURNISHED
9. RTD INSTALLED IN WELL
10. LOCATE CONNECTION IN BOTTOM HALF OF REACTOR COOLANT PIPING AT 45° ANGLE TO VERTICAL
11. DELETED
12. SPECIAL LINE INSULATION BEFORE ISOLATION VALVE, INSIDING VALVE
13. LOCATE ROOT VALVE ABOVE ELEVATION OF REACTOR VESSEL NOZZLES.
14. REACTOR COOLANT LOOP ANT PRESSURIZER SURGE LINE FURNISHED BY (W) INSPECTION
03.09.81 ADDED Q.1 CHGS OF REV. 8
REV C
P.G.&ECO
SHEET NO 8 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 9
35 MM
RM INDEXED REV 2


VENTING
8078A
8078D
8078B
8078C
RO 253
RO 254
HI-VOL SENSOR TYP (6)
(START-UP VENT)
CALIBRATION ACCESS
CALIBRATION ACCESS
HOT LEG #4
REACTOR
HOT LEG #3
SEAL TABLE
84-C
WIDE RANGE
REACTOR VESSEL LEVEL INSTRUMENTATION & VENT SYSTEMS
UNIT - 1
REF. DWG. - REACTOR COOLANT SYS. - 102007 SH. 7, REV. 9
PG&E CO.
SHEET 9
102028
REV. 9



35 MM NEG 9

RM INDEXED REV. 9



RTD BYPASS INSTRUMENTATION				
INSTRUMENT	LOOP 1	LOOP 2	LOOP 3	LOOP 4
HOT LEG MANIFOLD				
1 TEMPERATURE ELEMENT	TE-411A	TE-421A	TE-431A	TE-441A
2 TEMPERATURE ELEMENT	TE-411B	TE-421B	TE-431B	TE-441B
COLD LEG MANIFOLD				
1 TEMPERATURE ELEMENT	TE-412B	TE-422B	TE-432B	TE-442B
2 TEMPERATURE ELEMENT	TE-412A	TE-422A	TE-432A	TE-442A
BYPASS RETURN LINE				
FLOW ELEMENT	FE-409A	FE-409B	FE-409C	FE-409D
FLOW INDICATOR & ALARM REFERENCE BLOCK	FIC-409A (FSAR FIG 7.7-1)	FIC-409B (FSAR FIG 7.7-1)	FIC-409C (FSAR FIG 7.7-1)	FIC-409D (FSAR FIG 7.7-1)
HOT LEG				
TEMPERATURE SWITCH	TS-39	TS-40	TS-41	TS-42

SPECIAL NOTE

PARALLEL + HIGH PIPE PATHS SHALL BE OF APPROX. EQUAL EQUIVALENT LENGTHS WITH FLOW PATH NOT EXCEEDING 6 FEET. PENETRATIONS SHOULD BE IN THE SAME VERTICAL PLANE.

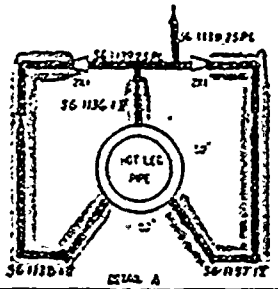


TABLE B

LOOP	HOT LEG MANIFOLD DRAIN LINE NO.	HOT LEG MANIFOLD DRAIN LINE NO.	COLD LEG MANIFOLD DRAIN LINE NO.	COLD LEG MANIFOLD DRAIN LINE NO.
1	S6-4140-¾		S6-4139-¾	
2	S6-4144-¾		S6-4142-¾	
3	S6-4149-¾		S6-4155-¾	
4	S6-4147-¾		S6-4153-¾	

NOTES:

1. HOT LEG BYPASS LINE SCOOPS. LOCATE UP STREAM OF SURGE LINE, LOOP 2 ONLY
2. RTD MANIFOLD-PIPE AND RTD'S SUPPLIED AS A PACKAGE MANIFOLD APPROX 30 INCHES LONG.
3. LOCATE RTD MANIFOLD ISOLATION VALVES MAX. 24 INCHES FROM MANIFOLD.
4. LOCATE CONNECTION ON UPPER SIDE OF PIPE CIRCUMFERENCE.
5. ALL BYPASS LOOP PIPING AND THE RTD MANIFOLDS SHALL HAVE REMOVABLE INSULATION UP TO LOOP ROOT VALVES.
6. TRANSFERRED TO SHEET 3, NOTE 13
7. VENT TO BE INSTALLED AT HIGH POINT AND DRAIN AT LOW POINT.
8. LENGTH OF HOT LEG 2 INCH PIPE UPSTREAM OF RTD A TO B TO BE A MAXIMUM OF 3 FEET.
9. LENGTH OF COLD LEG 2 INCH PIPE UPSTREAM OF RTD MANIFOLD C TO D TO BE MAXIMUM OF 6 FEET.
10. FLANGES ARE INSTALLED FOR INSERTION OF FLOW LIMITING ORIFICES. IF REQUIRED PIPE WILL FURNISH BLANK ORIFICE PLATES TO BE INSTALLED TO SIZE OF ACCURACY.
11. VALVES WITH SUFFIX A REFER TO LOOP 1
    B REFER TO LOOP 2
    C REFER TO LOOP 3
    D REFER TO LOOP 4
12. TS-39, 40, 41, & 42 ARE STAMPED TO LEAKOFF PIPE 18" TO 24" FROM VALVE

TABLE A				
	RTD MANIFOLD CONNECTION LINE			
	LOOP 1	LOOP 2	LOOP 3	LOOP 4
HOT LEG MANIFOLD DISCHARGE	—	52-C	52-C	52-C
COLD LEG MANIFOLD DISCHARGE	—	52-C	52-C	52-C
FROM HOT LEG LINE	115-D	A2-D	A1-D	A2-D
FROM COLD LEG LINE	110-D	B2-D	B1-D	B2-D
BYPASS RETURN LINE	113-D	28-D	4A-D	31-D
VALVE LEAKOFF TO PRESS RELIEF TANK	48-D QT	48-D QT	47-D QT	47-D QT

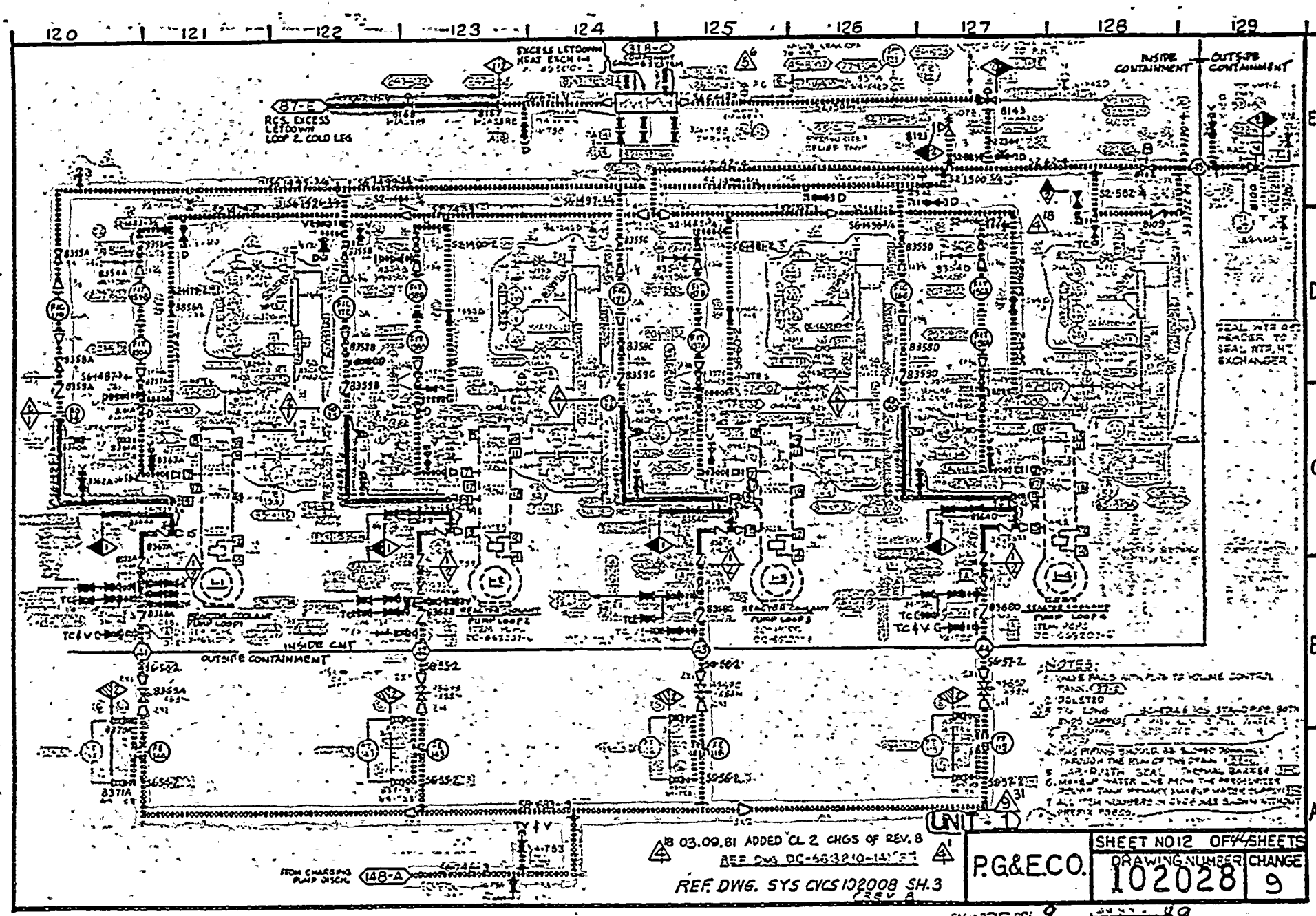
REF. DWG:
RCS SYST 102007 SHTS REV 5
REF DWG 6 BASIS:

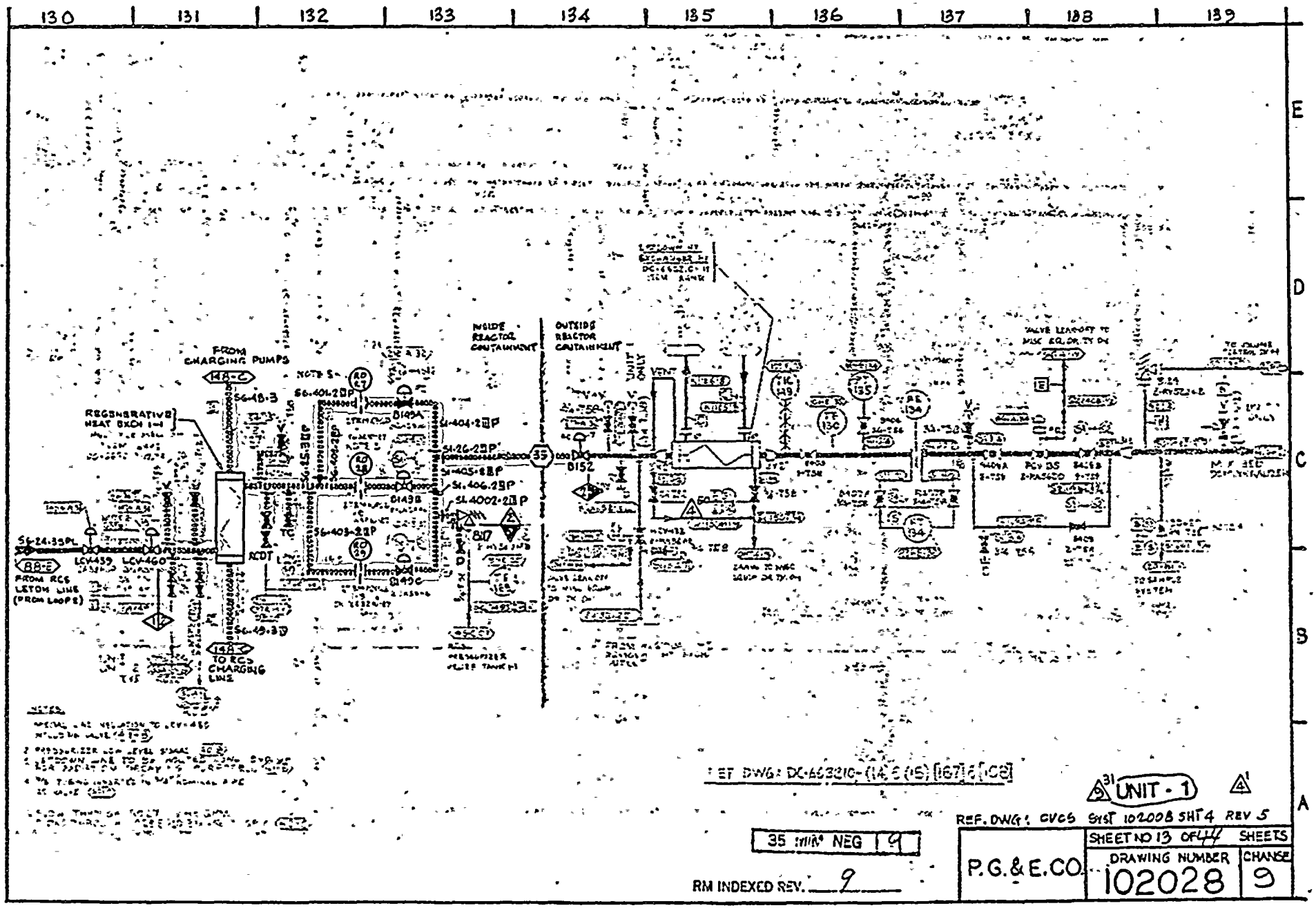
UNIT - 1

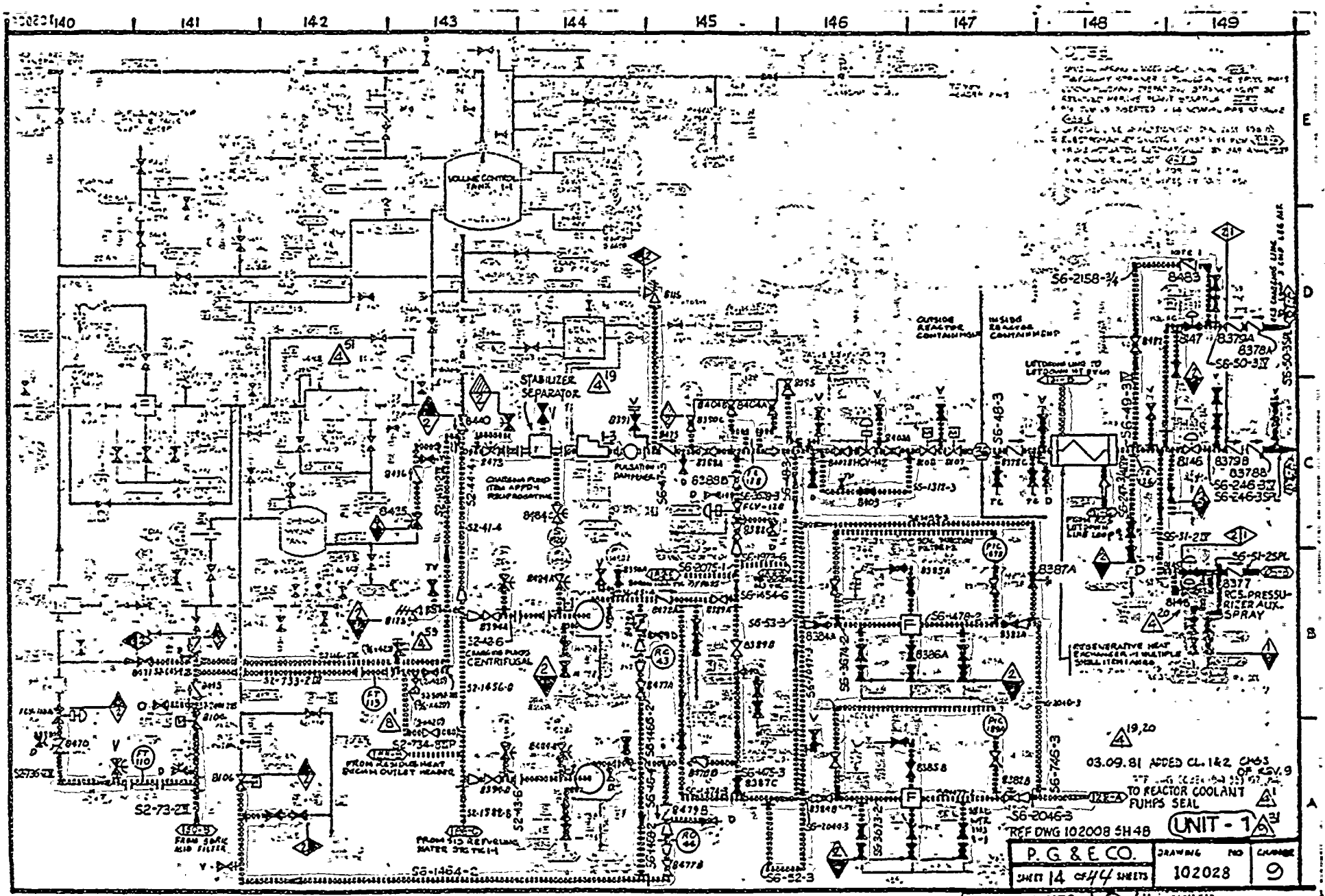
P. G. & E. CO.	DRAWING NO	CHANGE
SHEET 11 OF 44 SHEETS	102028	9 4Y

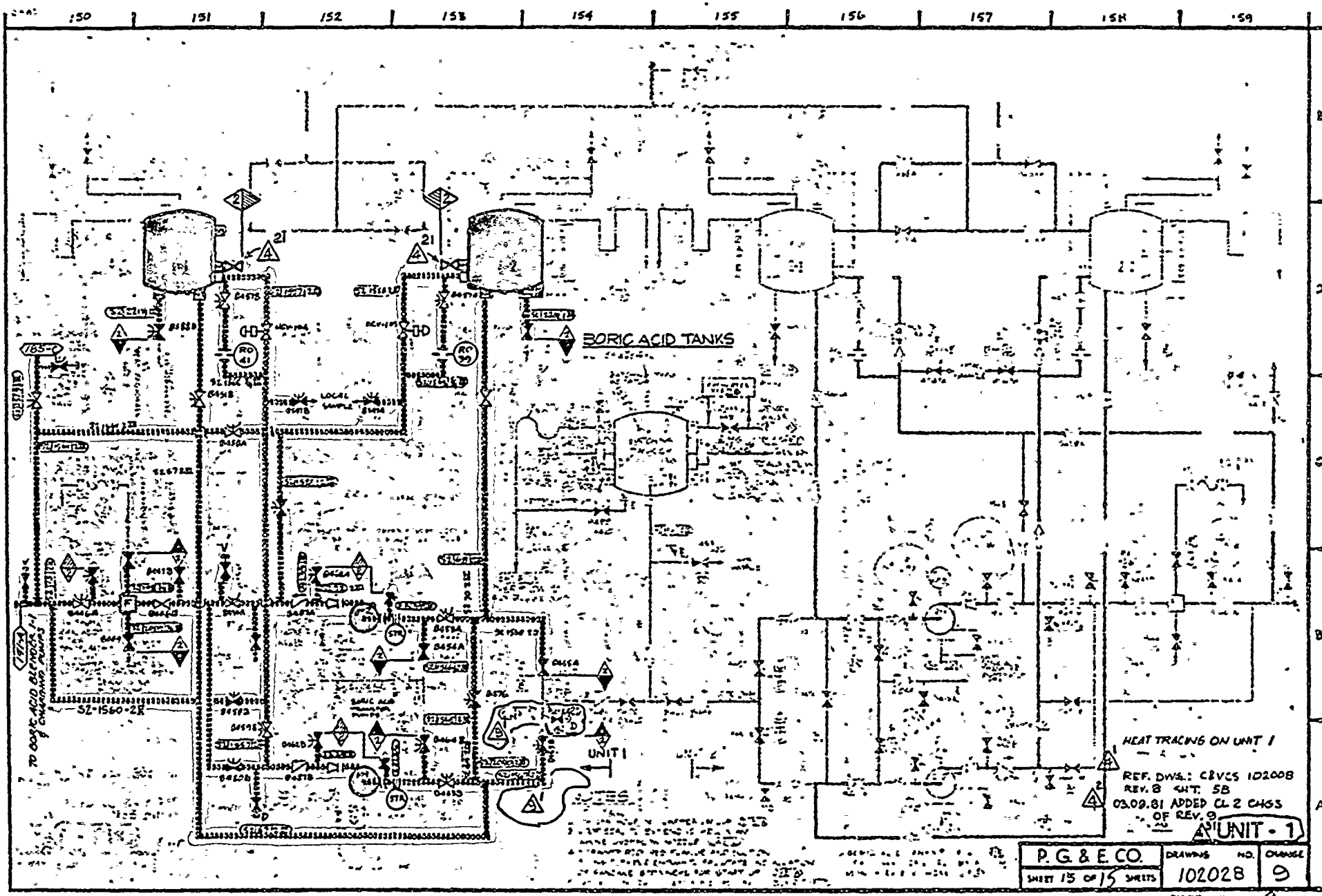
W NEG 9

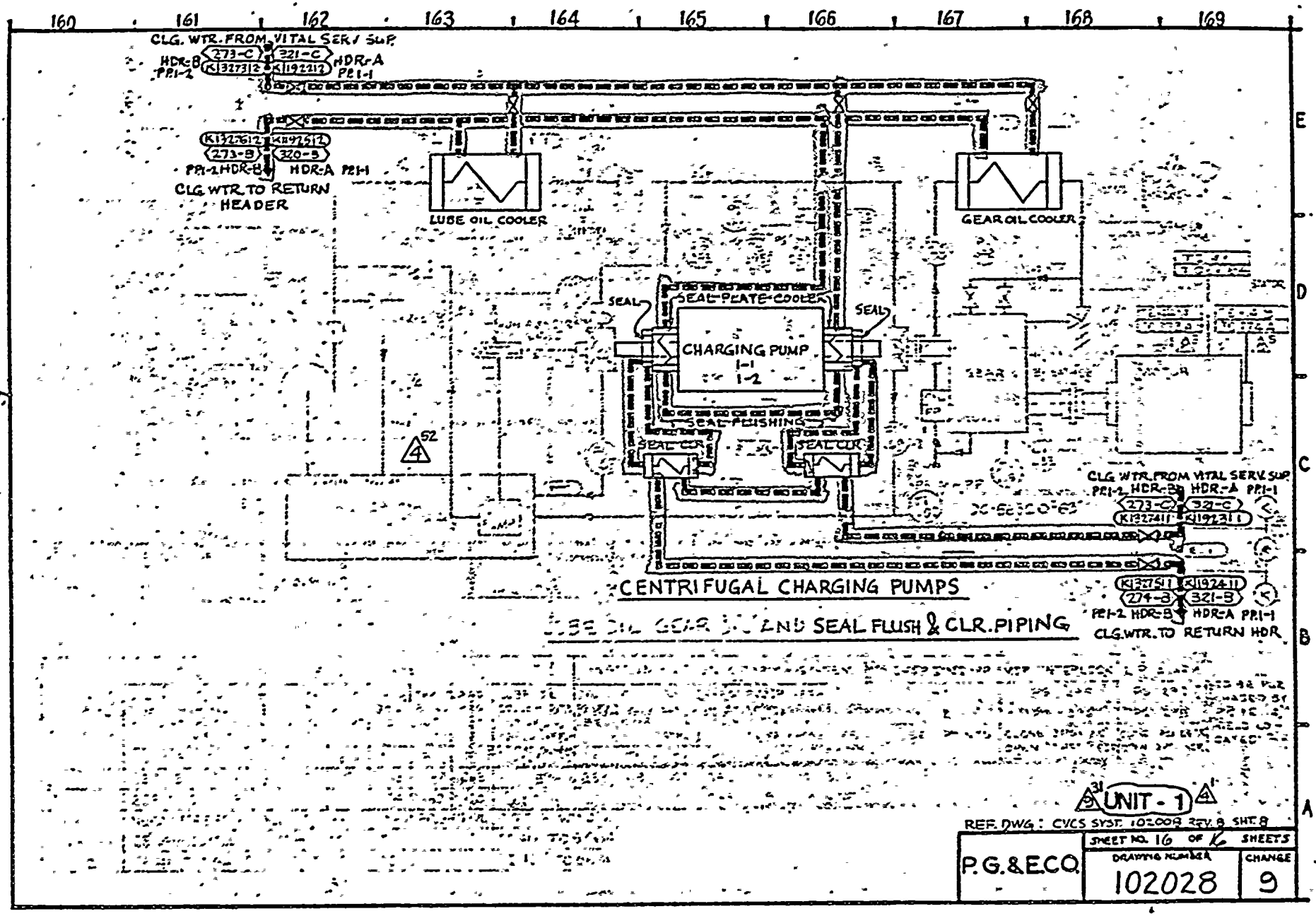
RM INDEXED REV. 9

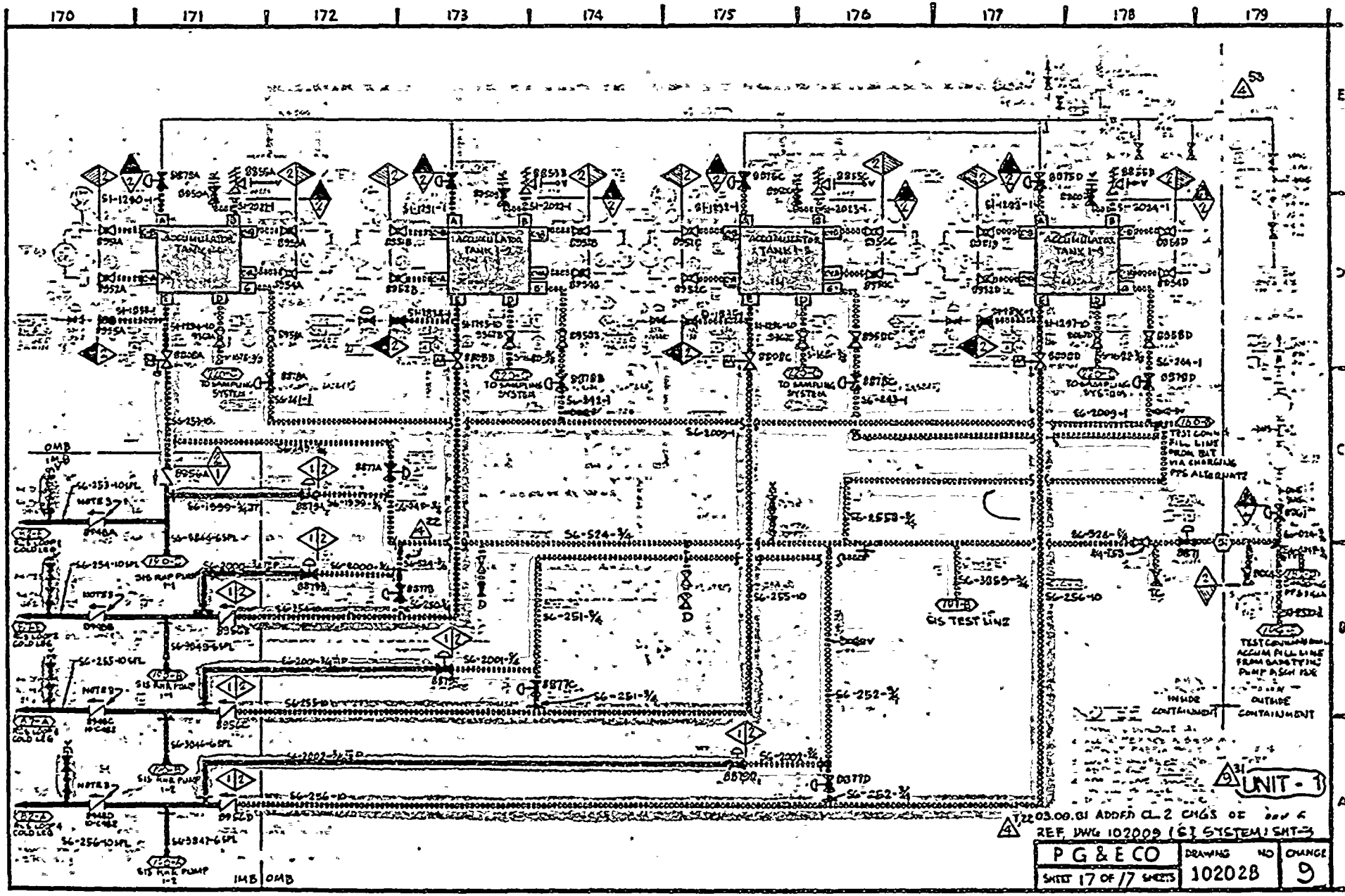

120
121
122
123
124
125
126
127
128
129
E
D
C
B
A
87-E
RCS EXCESS LETDOWN LOOP 2 COLD LEG
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
INSIDE CNT
OUTSIDE CONTAINMENT
148-A
FROM CHARGING PUMP DISCH.
REACTOR COOLANT PUMP LOOP 1
REACTOR COOLANT PUMP LOOP 2
REACTOR COOLANT PUMP LOOP 3
REACTOR COOLANT PUMP LOOP 4
UNIT 1
18 03.09.81 ADDED CL 2 CHGS OF REV. 8
REF DWG DC-663210-141
REF. DWG. SYS CVCS 102008 SH.3 REV A
P.G&E.CO.
SHEET NO 12 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 9
SIM INDEXED REV. 9 — 89

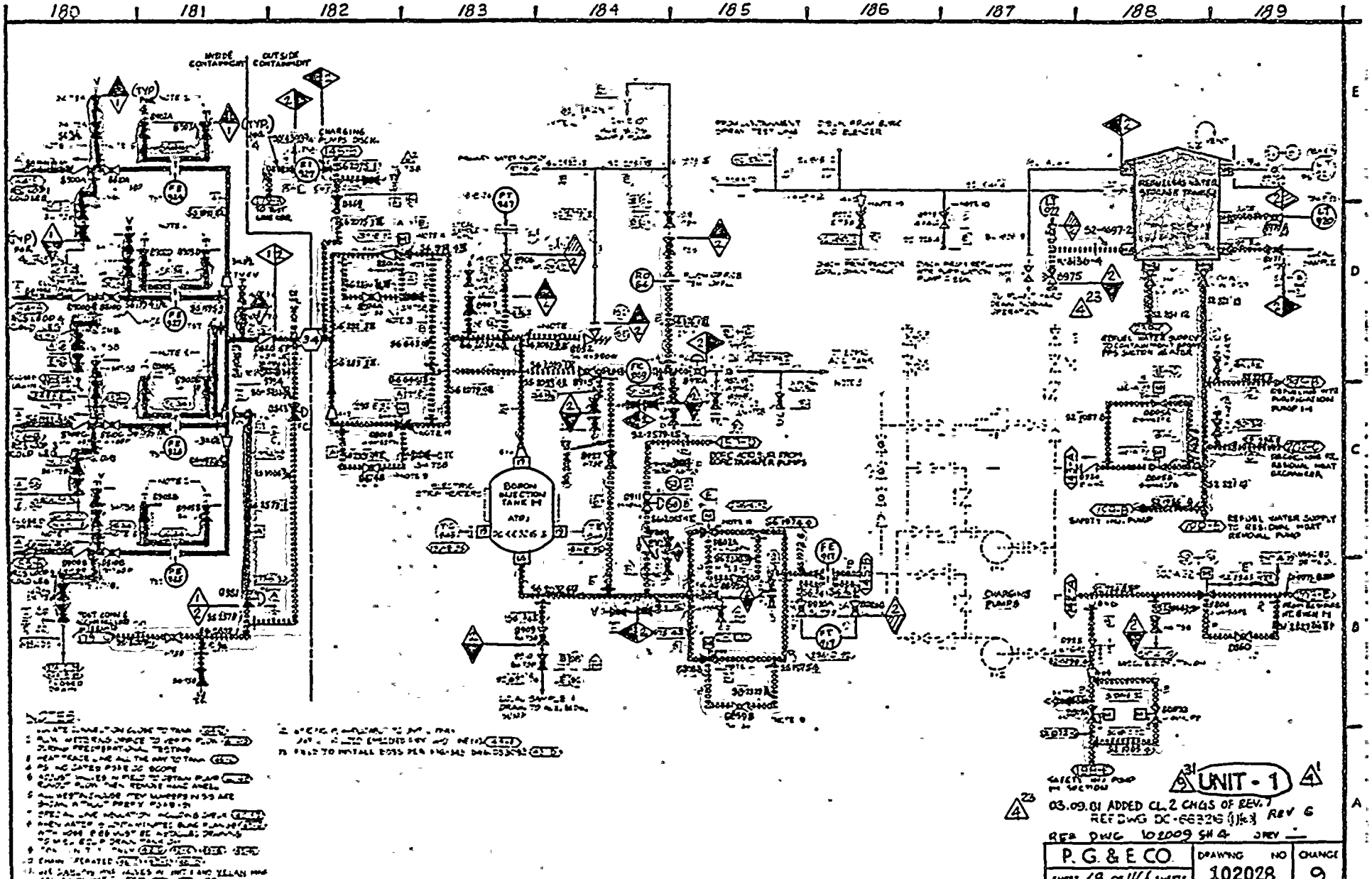

130
131
132
133
134
135
136
137
138
139
E
D
C
B
A
FROM CHARGING PUMPS
REGENERATIVE HEAT EXCH HX
INSIDE REACTOR CONTAINMENT
OUTSIDE REACTOR CONTAINMENT
FROM RCS LETDN LINE (FROM LOOP E)
TO RCS CHARGING LINE
RCDT
LCV-459
LCV-460
SET DWG: DC-66321C-(14.3 (15) (16.7) (C8)
UNIT - 1
REF. DWG: CVCS SYST 102008 SHT 4 REV 5
35 MIN NEG 9
RM INDEXED REV. 9
P.G.&E.CO.
SHEET NO 13 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 9


140
141
142
143
144
145
146
147
148
149
A
B
C
D
E
VOLUME CONTROL TANK T-1
STABILIZER SEPARATOR
CENTRIFUGAL
S6-2158-¾
S6-48-3
S6-49-3
S6-50-3
S6-246-3
S6-51-2
S6-1478-2
S6-2046-3
S6-1464-2
S6-52-3
S2-73-2
S2-734-8
S2-41-4
S2-42-6
S2-43-6
8483
8379A
8378A
8379B
8378B
8377
RCS PRESSURIZER AUX. SPRAY
REGENERATIVE HEAT EXCHANGER
TO REACTOR COOLANT PUMPS SEAL
REF DWG 102008 SH 48
UNIT - 1
03.09.81 ADDED CL. 142 CHGS OF REV. 9
P. G & E CO.
SHEET 14 OF 44 SHEETS
DRAWING NO 102028
CHANGE 9
35 M/M NEG
9
RM INDEXED REV. 9

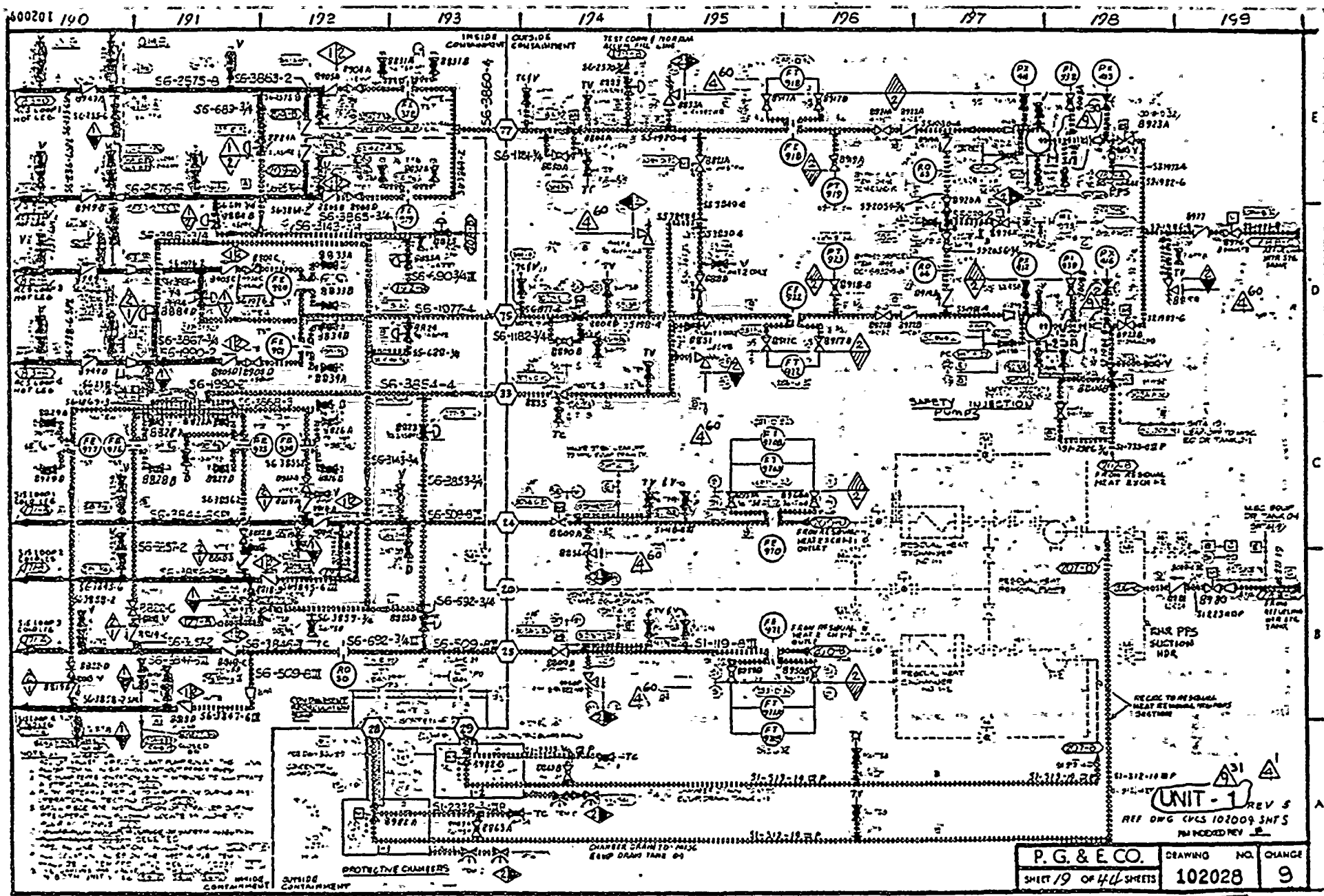

150
151
152
153
154
155
156
157
158
159
BORIC ACID TANKS
UNIT 1
HEAT TRACING ON UNIT 1
REF. DWG.: CBVCS 102008
REV. 8 SHT. 5B
03.09.81 ADDED CL 2 CHGS
OF REV. 9
UNIT - 1
P.G.&E.CO.
SHEET 15 OF 15 SHEETS
DRAWING NO. 102028
CHANGE 9

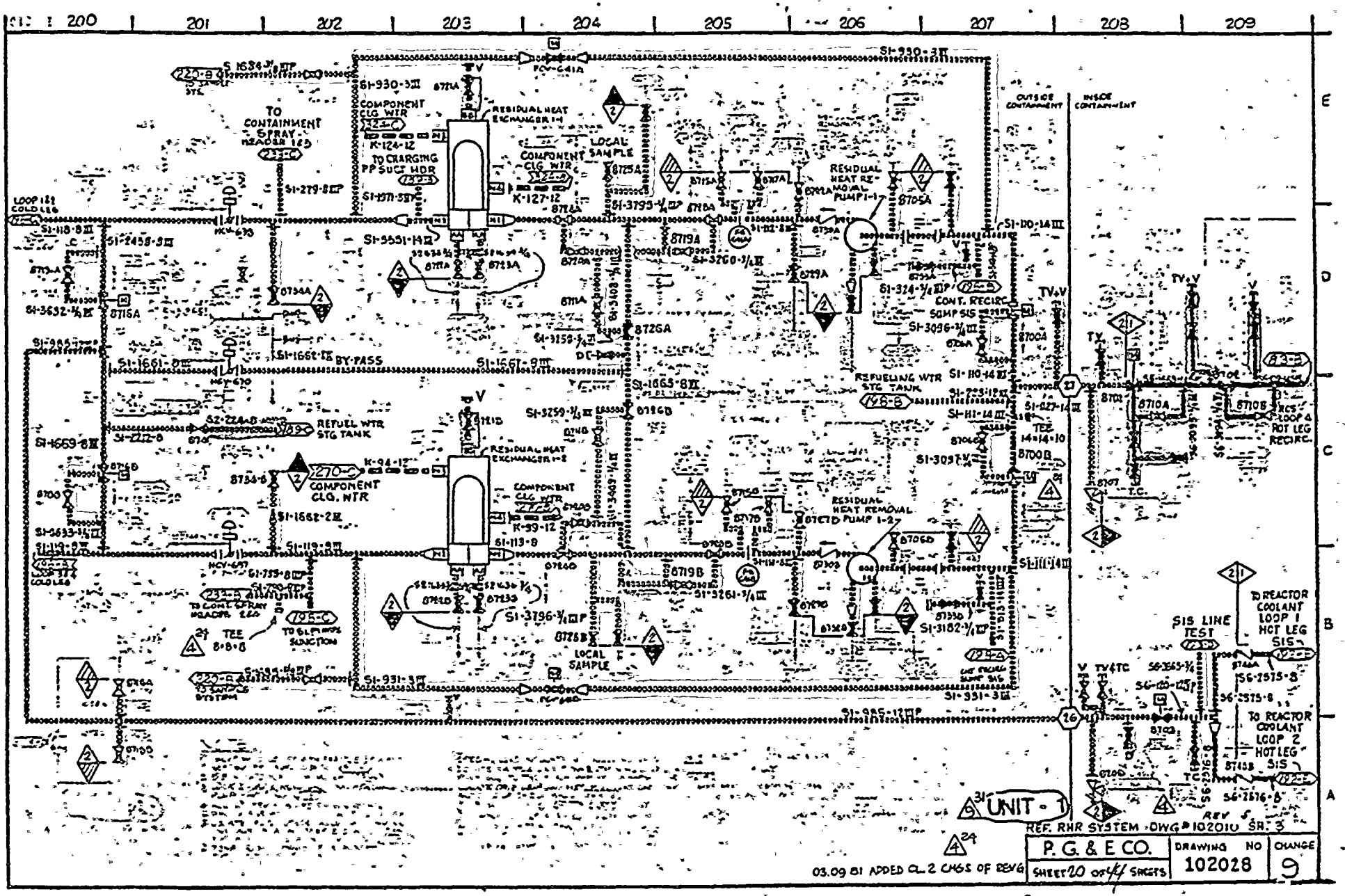

160
161
162
163
164
165
166
167
168
169
E
D
C
B
A
CLG. WTR. FROM VITAL SERV SUP.
HDR-B
PRI-2
273-C
321-C
K1327312
K1192312
HDR-A
PRI-1
K1327612
K1192512
273-B
320-B
PRI-2 HDR-B
HDR-A PRI-1
CLG WTR TO RETURN HEADER
LUBE OIL COOLER
GEAR OIL COOLER
SEAL
SEAL PLATE COOLER
SEAL
CHARGING PUMP
1-1
1-2
SEAL FLUSHING
SEAL CLR
SEAL CLR
52
CLG WTR. FROM VITAL SERV SUP
PRI-2 HDR-B
HDR-A PRI-1
273-C
321-C
K1327411
K1192311
K1327511
K1192411
274-B
321-B
PRI-2 HDR-B
HDR-A PRI-1
CLG. WTR. TO RETURN HDR.
CENTRIFUGAL CHARGING PUMPS
LUBE OIL COOLER AND SEAL FLUSH & CLR. PIPING
UNIT - 1
REF. DWG: CVCS SYST. 102009 REV. 8 SHT. 8
P.G.&E.CO.
SHEET NO. 16 OF 16 SHEETS
DRAWING NUMBER
102028
CHANGE
9

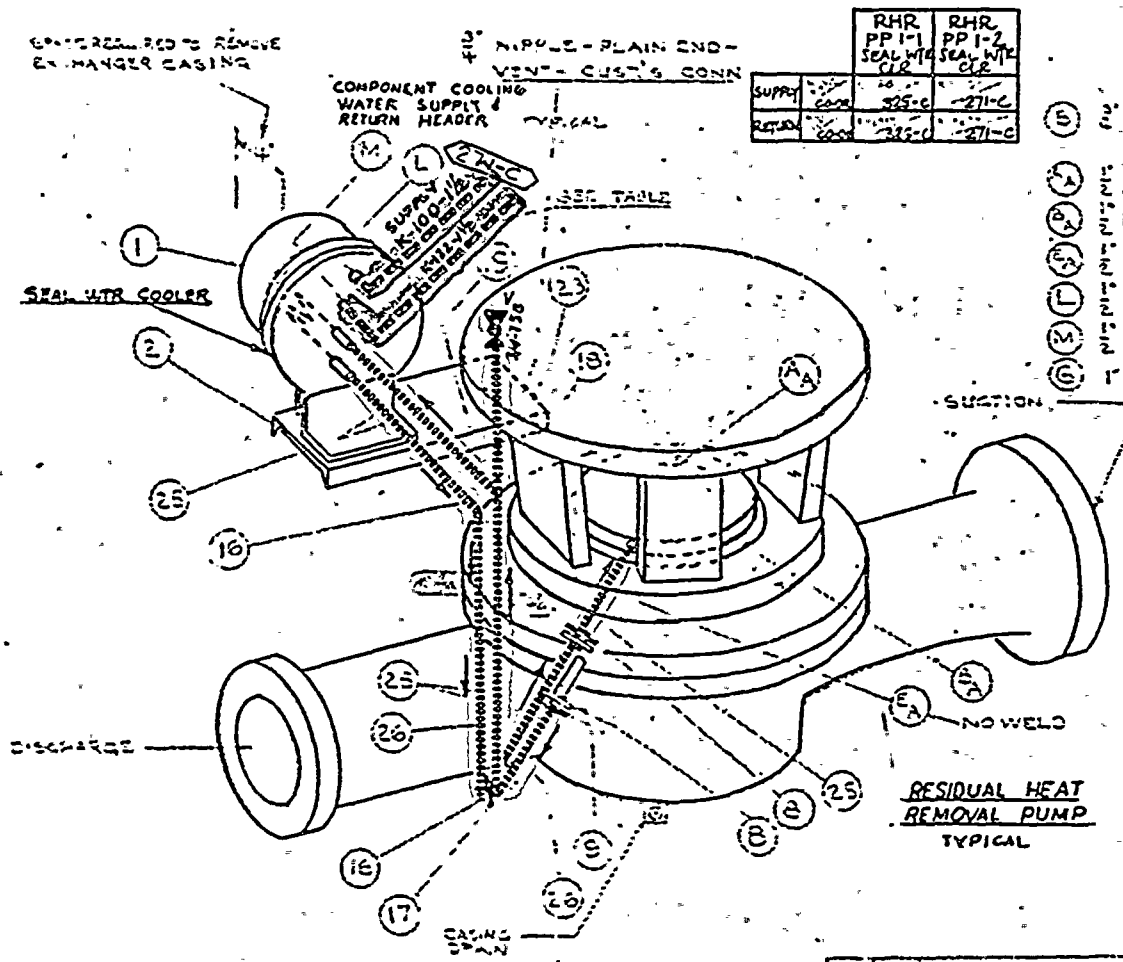

170
171
172
173
174
175
176
177
178
179
ACCUMULATOR TANK 1-1
ACCUMULATOR TANK 1-2
ACCUMULATOR TANK 1-3
ACCUMULATOR TANK 1-4
TO SAMPLING SYSTEM
SIS RHR PUMP 1-1
SIS RHR PUMP 1-2
SIS TEST LINE
TEST CONN FILL LINE FROM BIT VIA CHARGING PPS ALTERNATE
TEST CONN ACCUM FILL LINE FROM SAMPLING PUMP DISCH HDR
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
UNIT - 1
REF DWG 102009 (E) SYSTEM 1 SHT-3
P G & E CO
SHEET 17 OF 17 SHEETS
DRAWING NO 102028
CHANGE 9
RM INDEXED REV. 9
35 M/M NEG 9



RM INDEXED REV. 9


190
191
192
193
194
195
196
197
198
199
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
SAFETY INJECTION PUMPS
RHR PPS SUCTION HDR
PROTECTIVE CHANNELS
UNIT - 1 REV 5
REF DWG CYCLS 102009 SHTS
RM INDEXED REV. 9
P. G. & E. CO.
SHEET 19 OF 44 SHEETS
DRAWING NO. 102028
CHANGE 9


200
201
202
203
204
205
206
207
208
209
TO CONTAINMENT SPRAY HEADER 1&2
TO CHARGING PP SUCT HDR
COMPONENT CLG WTR
RESIDUAL HEAT EXCHANGER 1-1
RESIDUAL HEAT EXCHANGER 1-2
LOCAL SAMPLE
RESIDUAL HEAT REMOVAL PUMP 1-1
RESIDUAL HEAT REMOVAL PUMP 1-2
CONT. RECIRC SUMP SIS
REFUELING WTR STG TANK
BY-PASS
TEE 14-14-10
TO REACTOR COOLANT LOOP 1 HOT LEG SIS
TO REACTOR COOLANT LOOP 2 HOT LEG SIS
SIS LINE TEST
OUTSIDE CONTAINMENT
INSIDE CONTAINMENT
UNIT - 1
REF. RHR SYSTEM DWG # 102010 SH. 3
03.09 81 ADDED CL. 2 CHGS OF REV 6
P.G. & E CO.
SHEET 20 OF 44 SHEETS
DRAWING NO 102028
CHANGE 9
35 MM NEG 9
RM INDEXED REV. 9



		RHR PP 1-1 SEAL WTR CLR	RHR PP 1-2 SEAL WTR CLR
SUPPLY	3/4" COND	325-C	271-C
RETURN	3/4" COND	325-C	271-C

(5) 3" - 300# RAISED FACE FLANGE - PUMP CASING OUTLET - PIPED TO HEAT EXCHANGER (PRESSURE DROP TYPE)

(A) P.T. - VENT OR QUENCH

(B) P.T. - DRAIN (GLAND DRAIN)

(F) P.T. - FLUSHING CONN. - PIPED FROM HEAT EXCHANGER

(L) P.T. - COOLING LIQUID - IN

(M) P.T. - COOLING LIQUID - OUT

HEAT EXCHANGER 5 SPOT REQUIRED

(6) 1" 300# RF FLANGE - CASING DRAIN

DYE PENETRATE TEST REQUIRED.
ALL SEALWELDS PER PT ASME-3
NO POSTWELD HEAT TREATMENT REQUIRED.

SHOP NOTE:
USE TEFLON TAPE ON "A" CONN.

RECIRCULATION OF LIQUID FROM SEAL WITH PUMPING RING - THRU COOLER & BACK TO SEAL.

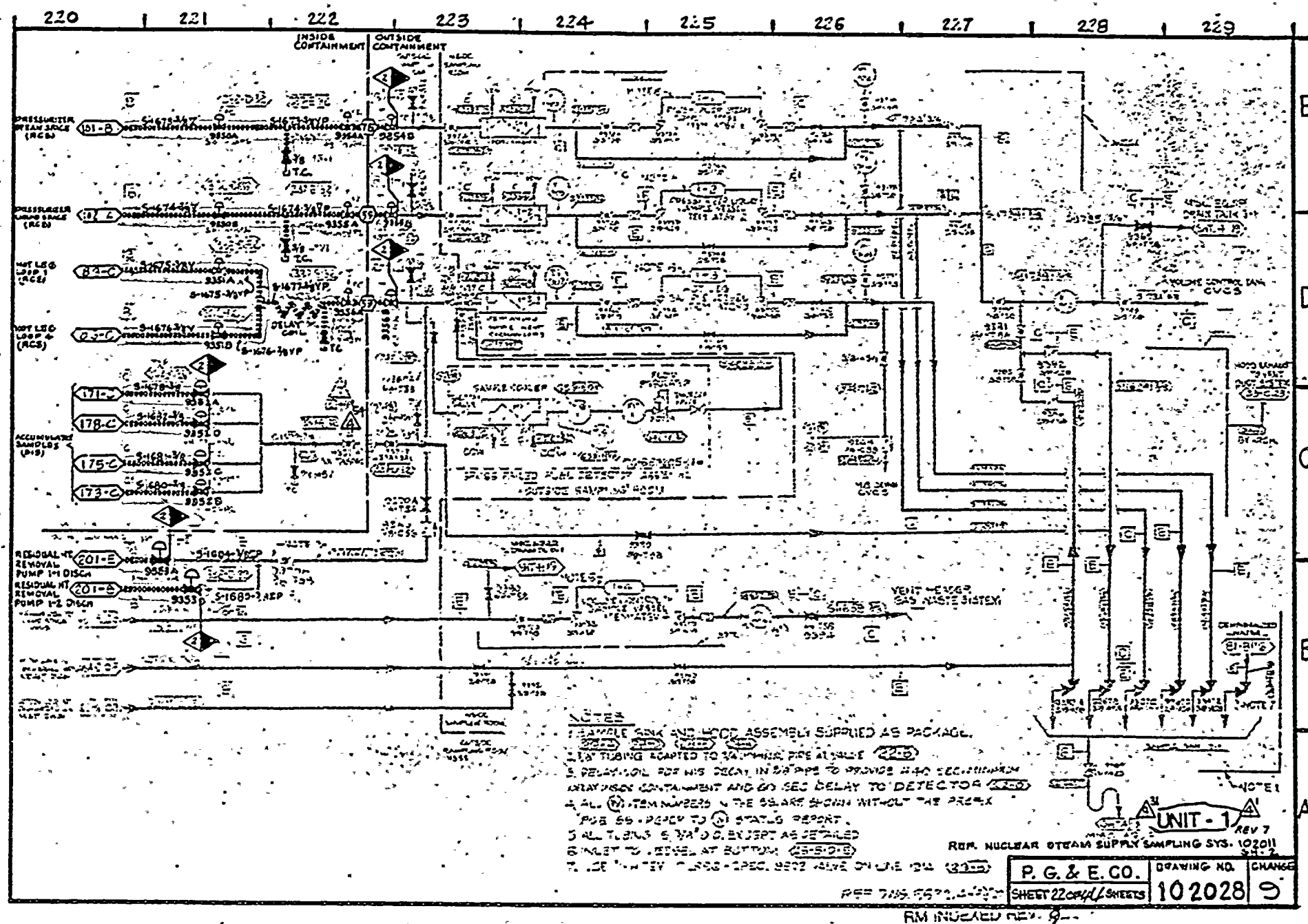
SEAL PIPING

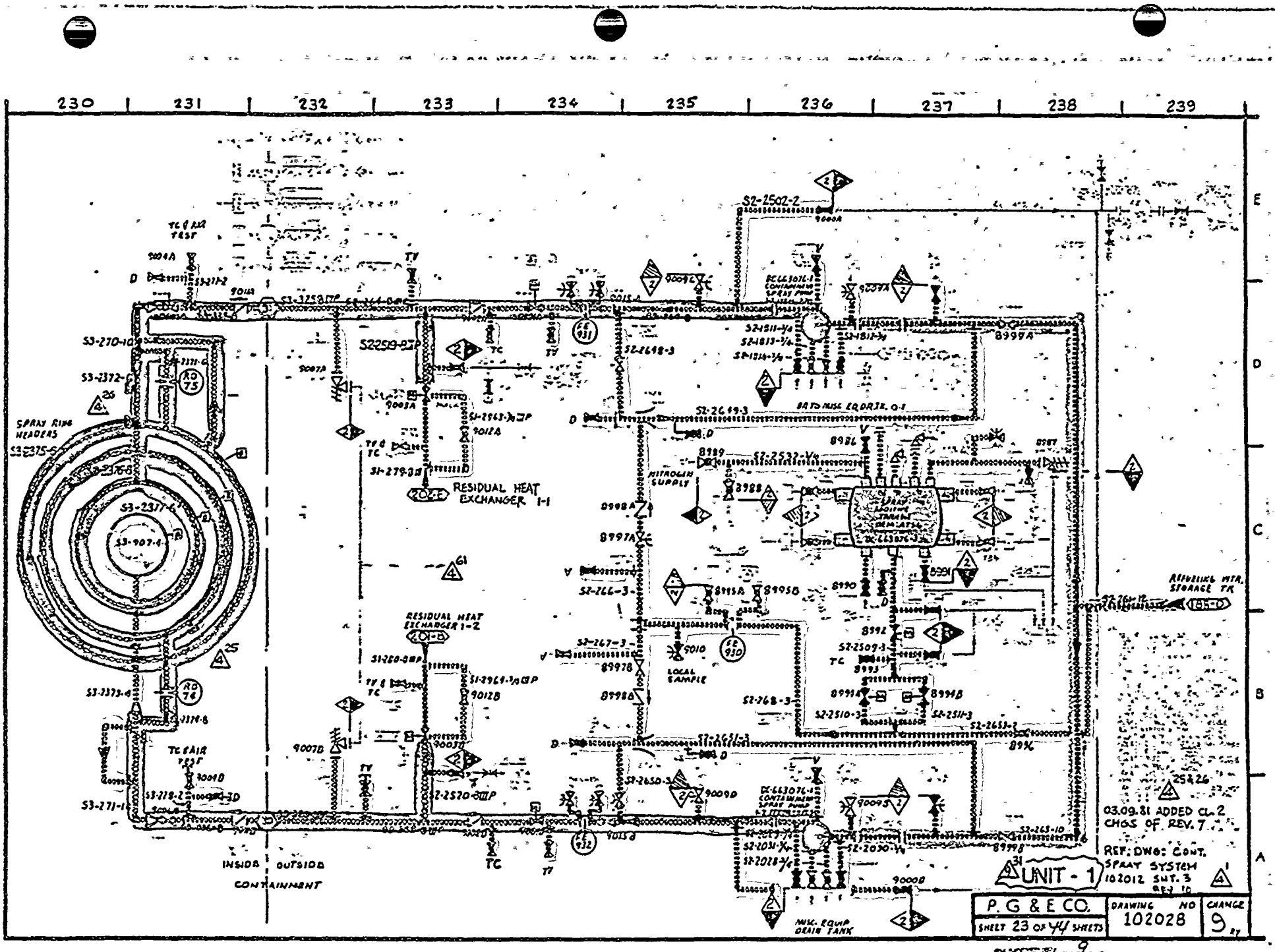
UNIT - 1

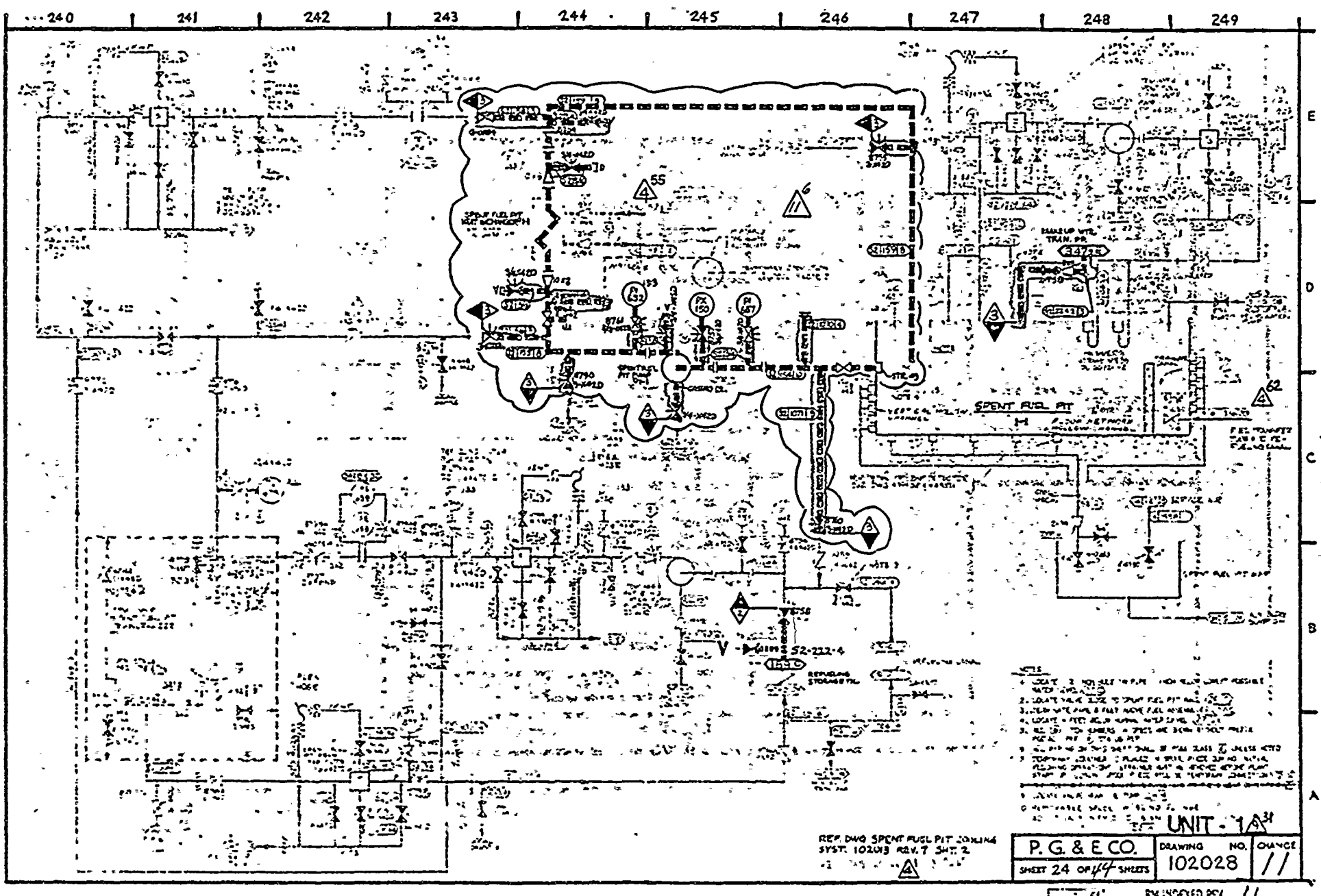
REF. DWG: RHR. SYST. 102010 SHT. 4

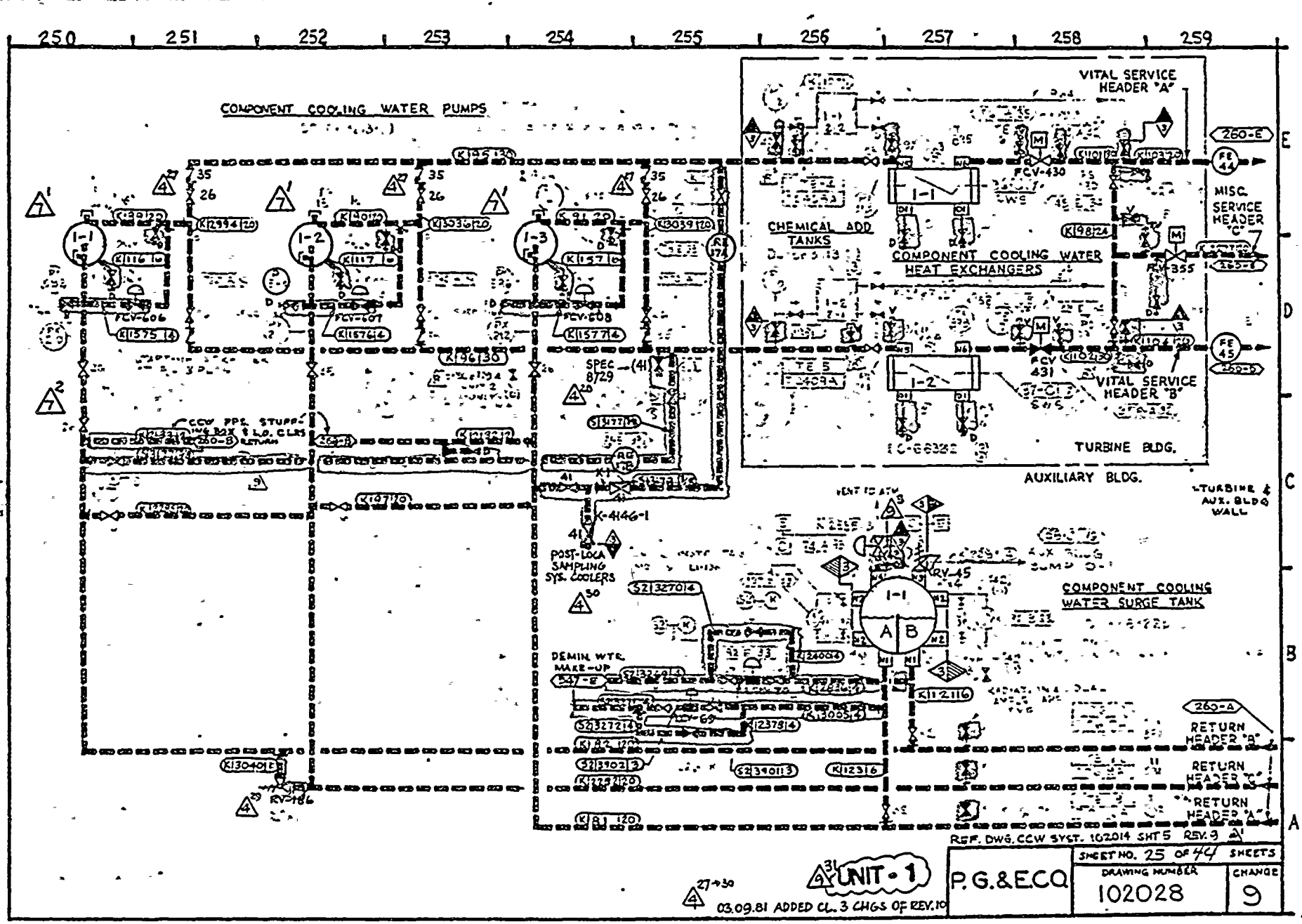
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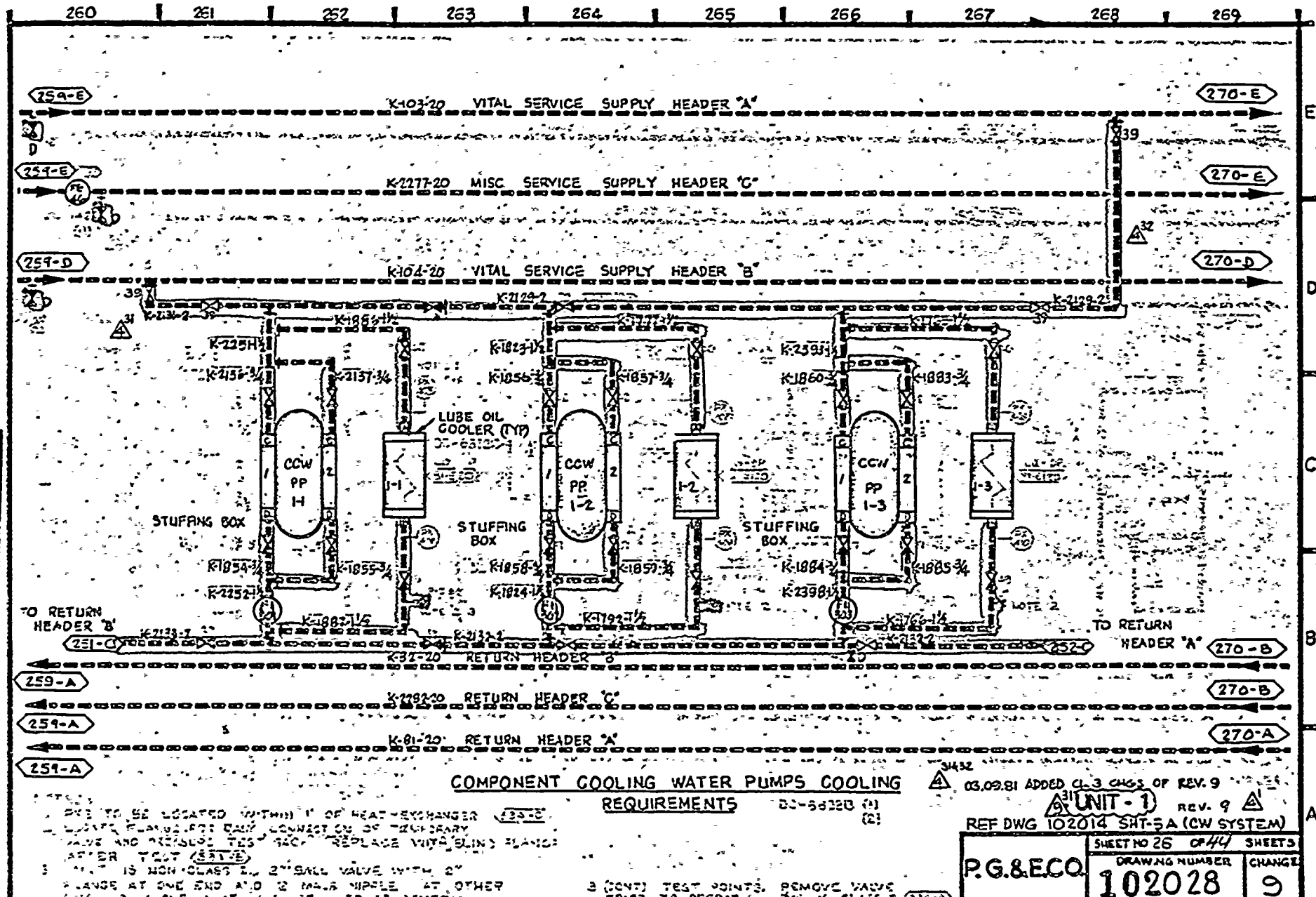
P G & E CO.	DRAWING NO	CHANGE
SHEET 21 OF 44 SHEETS	102028	9 AY


220
221
222
223
224
225
226
227
228
229
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
PRESSURIZER STEAM SPACE (RCS)
PRESSURIZER LIQUID SPACE (RCS)
HOT LEG LOOP 1 (RCS)
HOT LEG LOOP 4 (RCS)
ACCUMULATOR SAMPLES (RHS)
RESIDUAL HT REMOVAL PUMP 1-1 DISCH
RESIDUAL HT REMOVAL PUMP 1-2 DISCH
101-B
102-C
103-C
171-C
178-C
175-C
173-C
201-E
201-B
SAMPLE COOLER
VENT HEADER GAS WASTE SYSTEM
CVCS
NOTES
UNIT - 1
REV 7
RCM. NUCLEAR STEAM SUPPLY SAMPLING SYS. 102011
P. G. & E. CO.
SHEET 22 OF 41 SHEETS
DRAWING NO. 102028
CHANGE 9
RM INDICATED REV. 8
M NEG 19
E
D
C
B
A


230
231
232
233
234
235
236
237
238
239
E
D
C
B
A
S2-2502-2
SPRAY RING HEADERS
S3-2375-6
S3-2376-6
S3-2377-6
S3-907-6
S3-270-10
S3-2372-6
S3-2373-6
S3-2374-6
S3-271-10
S3-2378-2
S3-2379-2
S2259-8"P
S1-3258-8"P
S1-2563-3/4"P
S1-279-3"P
RESIDUAL HEAT EXCHANGER 1-1
RESIDUAL HEAT EXCHANGER 1-2
S1-2760-8"P
S1-2969-3/4"P
S1-2570-8"P
S2-2698-3
S2-2649-3
S2-2532-3/4
S2-2644-3
S2-267-3
S2-2509-3
S2-268-3
S2-2510-3
S2-2511-3
S2-2650-3
S2-2653-2
S2-2654-10
S2-2031-3/4
S2-2030-3/4
S2-2028-3/4
S2-2811-3/4
S2-2813-3/4
S2-2814-3/4
NITROGEN SUPPLY
LOCAL SAMPLE
REFUELING WTR. STORAGE TK
MISC. EQUIP. DRAIN TANK
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
TC & AIR TEST
UNIT - 1
SPRAY SYSTEM 102012 SHT. 3 REV 10
03.09.81 ADDED CL. 2 CHGS OF REV. 7
REF. DWG: CONT.
P. G & E CO.
SHEET 23 OF 44 SHEETS
DRAWING NO 102028
CHANGE 9


240
241
242
243
244
245
246
247
248
249
E
D
C
B
A
SPENT FUEL PIT
52-222-4
REF DWG SPENT FUEL PIT COOLING SYST. 102013 REV. 7 SHT. 2
UNIT - 1
P. G. & E CO.
SHEET 24 OF 44 SHEETS
DRAWING NO. 102028
CHANGE 11


250
251
252
253
254
255
256
257
258
259
COMPONENT COOLING WATER PUMPS
VITAL SERVICE HEADER "A"
CHEMICAL ADD TANKS
COMPONENT COOLING WATER HEAT EXCHANGERS
FCV-430
FCV 431
MISC. SERVICE HEADER "C"
VITAL SERVICE HEADER "B"
TURBINE BLDG.
AUXILIARY BLDG.
TURBINE & AUX. BLDG WALL
260-E
260-D
260-A
FE 44
FE 45
FCV-606
FCV-607
FCV-608
CCW PPL. STUPP-ING BOX & LO. CLRS
POST-LOCA SAMPLING SYS. COOLERS
DEMIN WTR. MAKE-UP
COMPONENT COOLING WATER SURGE TANK
RV-45
RV-186
RETURN HEADER "B"
RETURN HEADER "A"
REF. DWG. CCW SYST. 102014 SHT 5 REV. 9
UNIT - 1
03.09.81 ADDED CL. 3 CHGS OF REV. 10
P.G.&E.CO.
SHEET NO. 25 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 9
RM INDEXED REV. 5
RM INDEXED REV. 9



COMPONENT COOLING WATER PUMPS COOLING REQUIREMENTS

DC-66320 (1) (2)

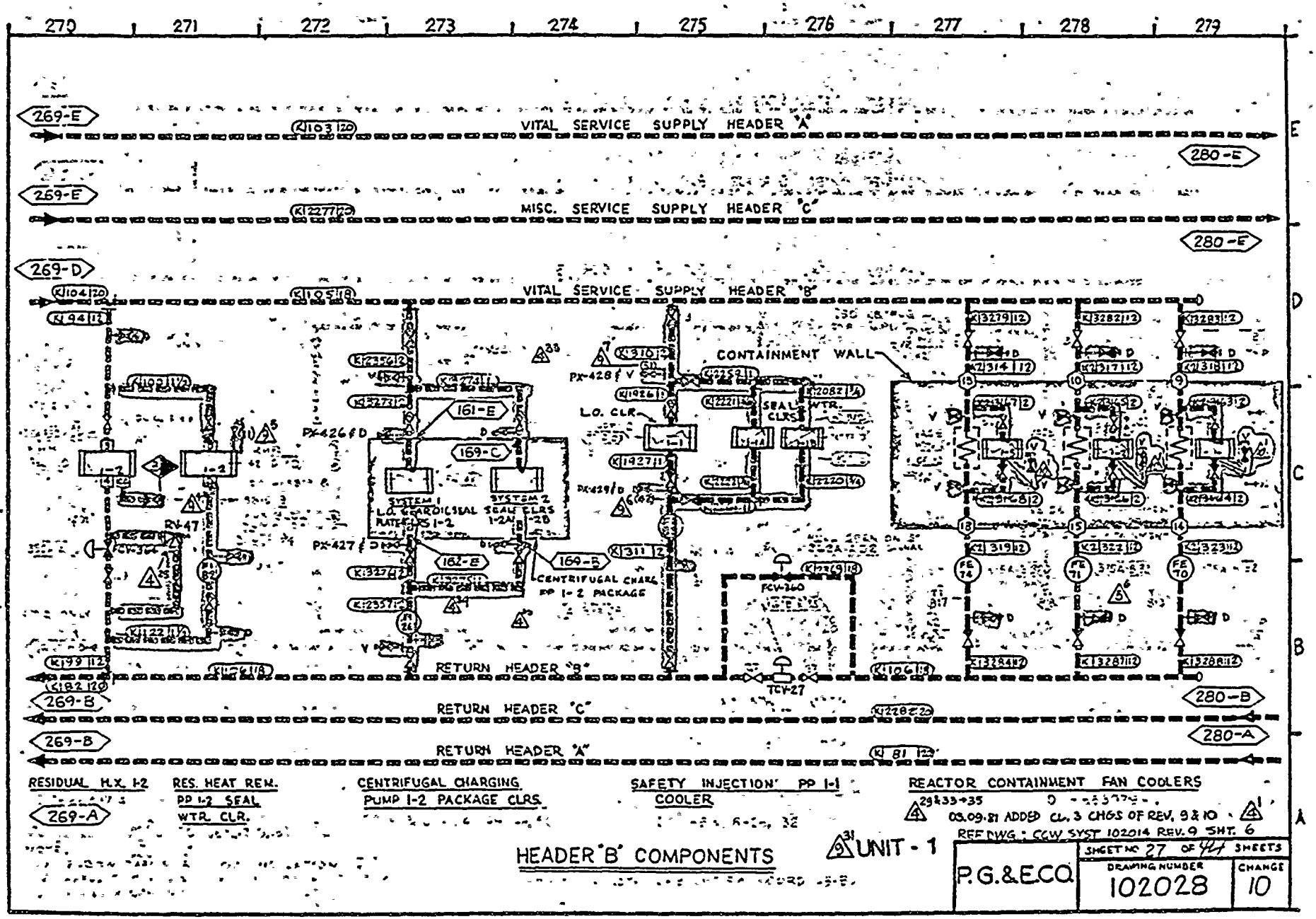
3 (CONT) TEST POINTS. REMOVE VALVE

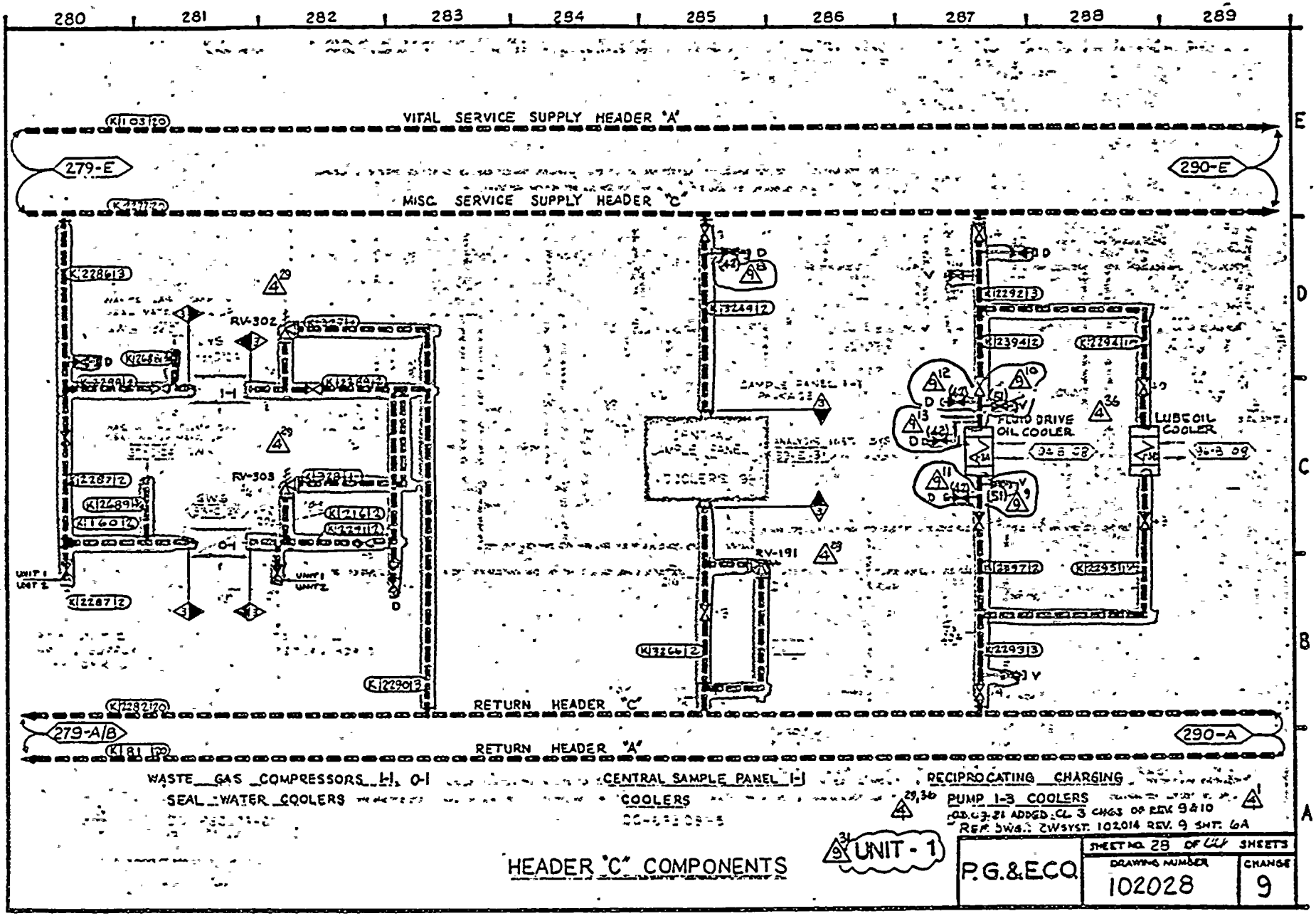
03.09.81 ADDED Q-3 CHGS OF REV. 9

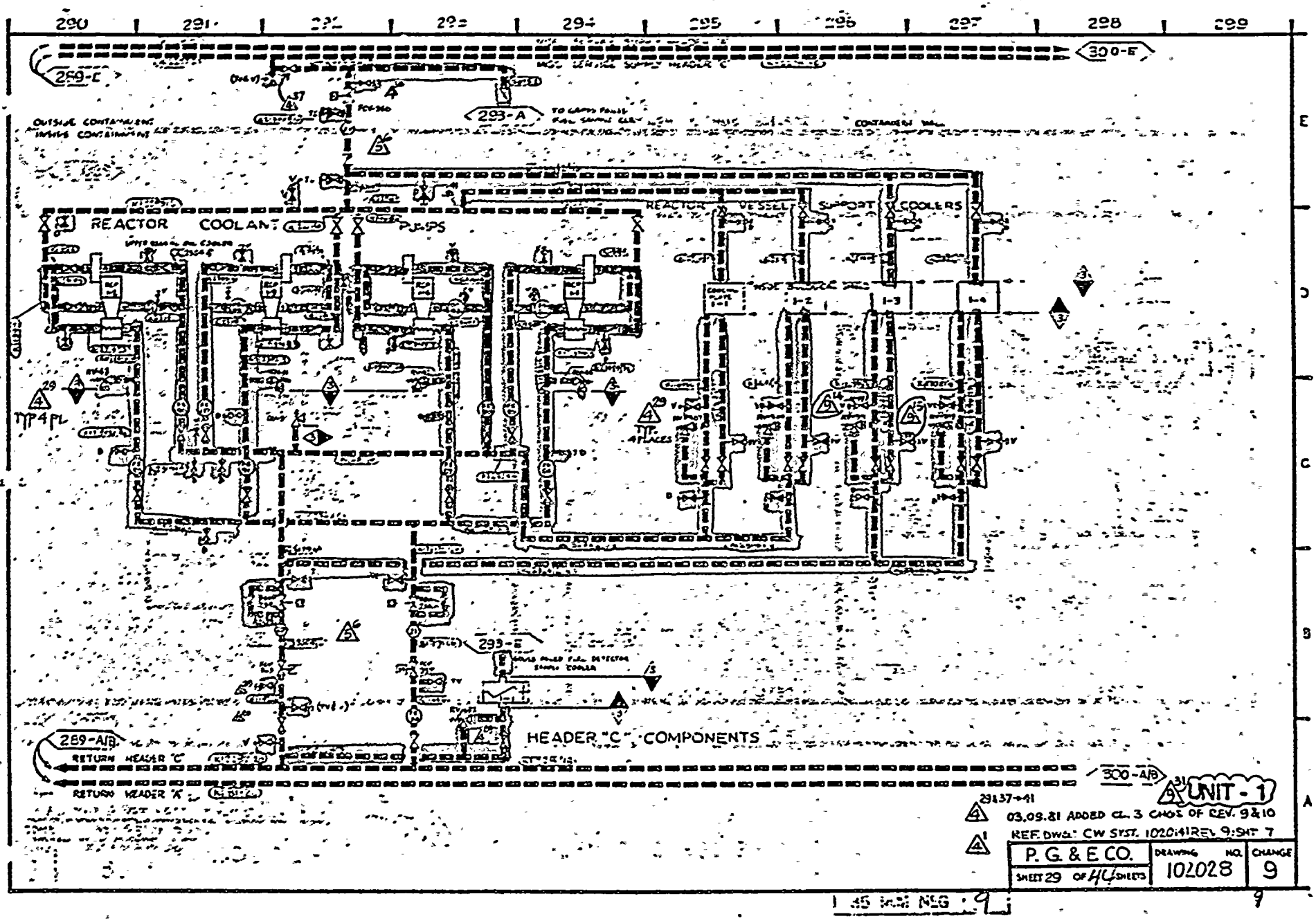
UNIT - 1 REV. 9

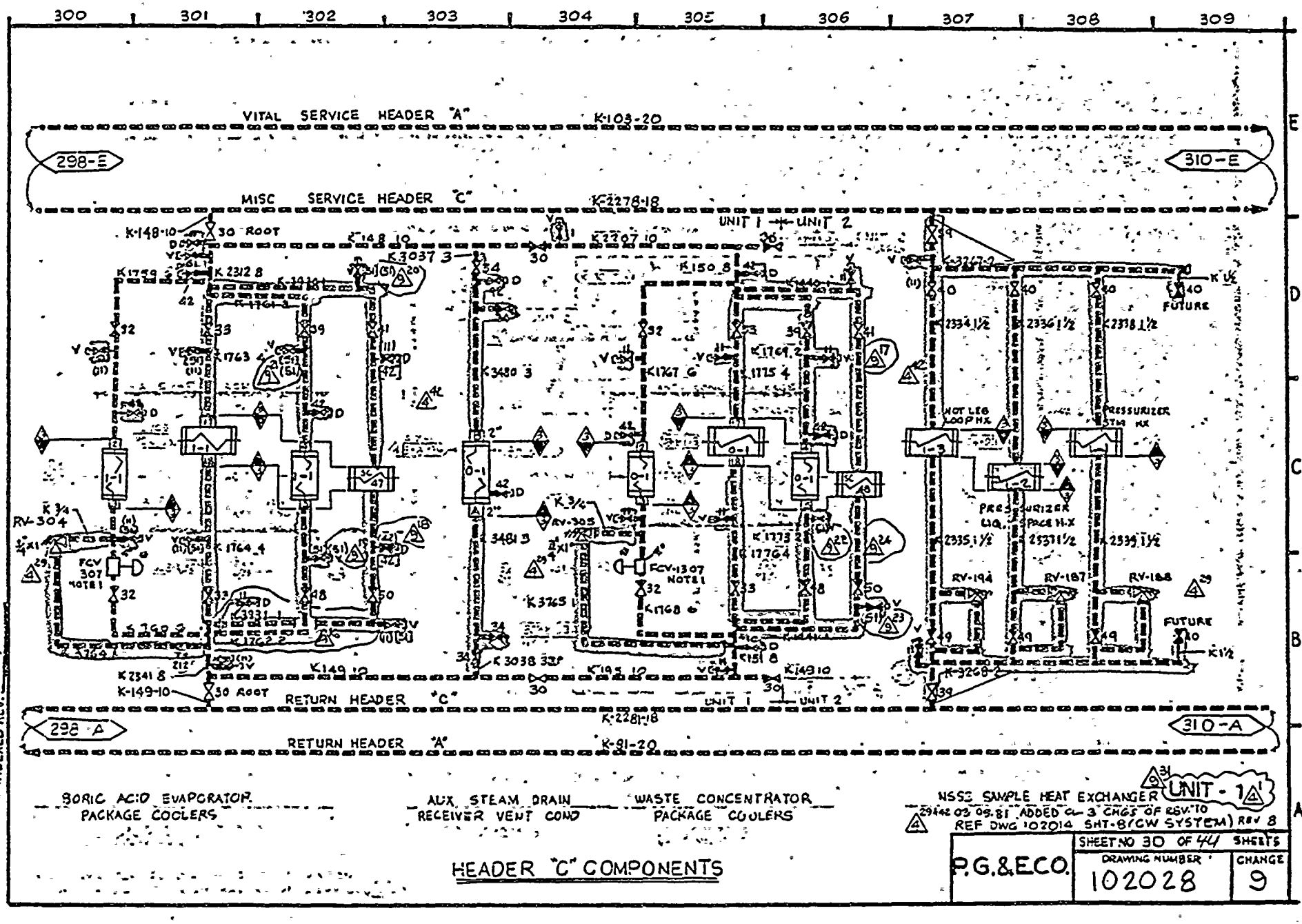
REF DWG 102014 SHT-5A (CW SYSTEM)

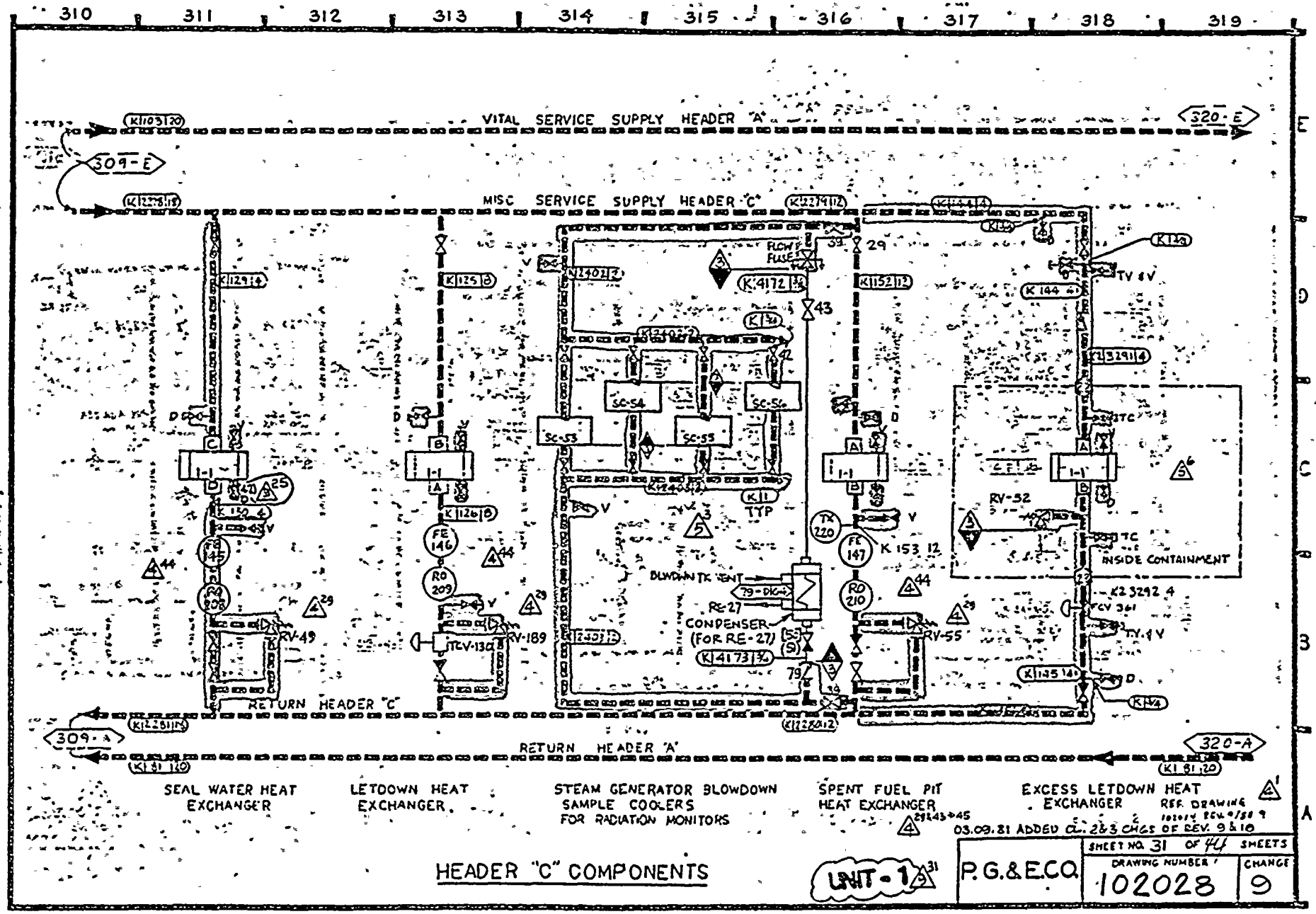
P.G.&E.CO.	SHEET NO 26 OF 44 SHEETS	
	DRAWING NUMBER 102028	CHANGE 9

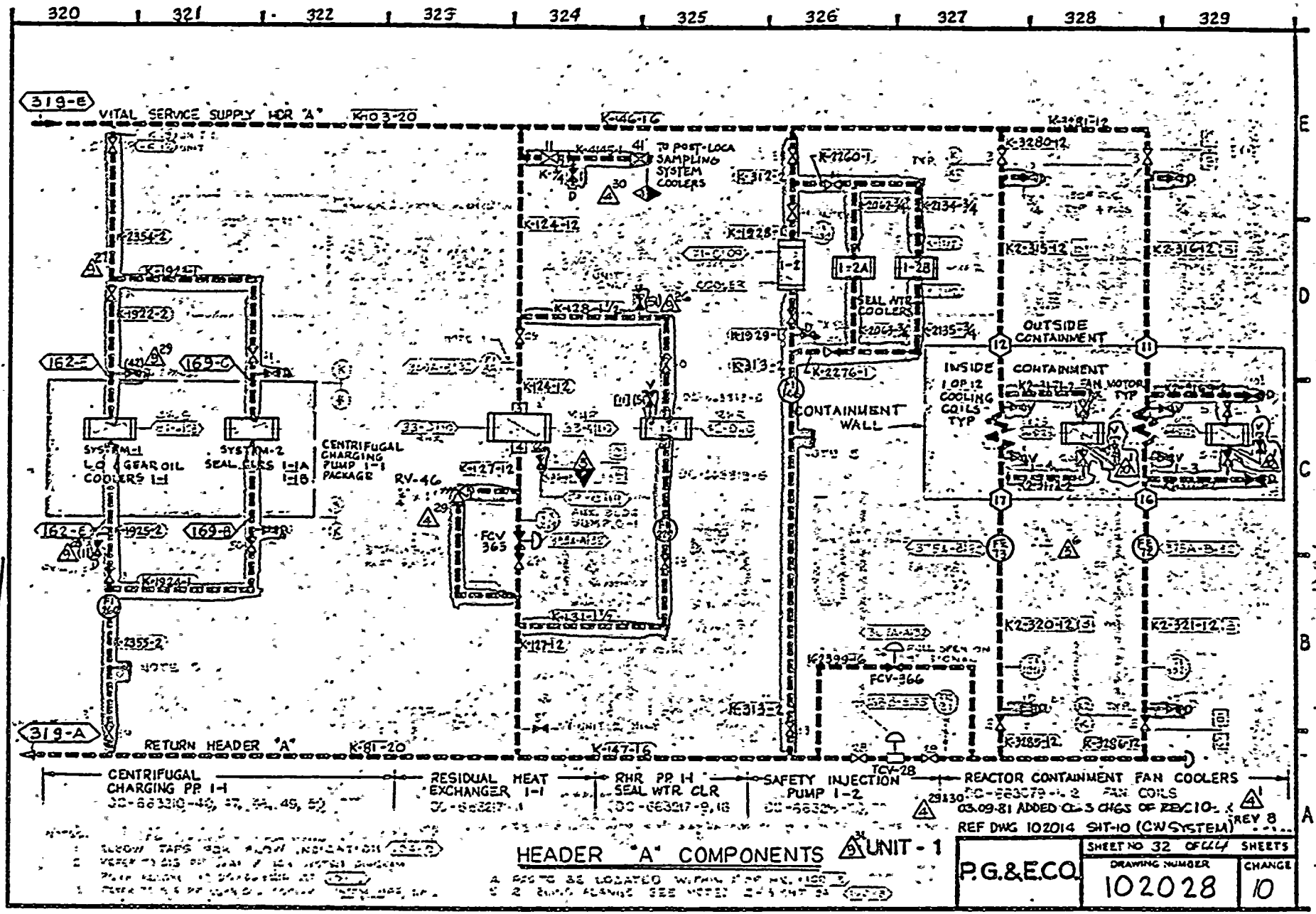

270
271
272
273
274
275
276
277
278
279
269-E
VITAL SERVICE SUPPLY HEADER "A"
280-E
269-E
MISC. SERVICE SUPPLY HEADER "C"
280-E
269-D
VITAL SERVICE SUPPLY HEADER "B"
CONTAINMENT WALL
161-E
169-C
169-B
162-E
SEAL CLRS
L.O. CLR
SYSTEM 1
SYSTEM 2
CENTRIFUGAL CHARG PP 1-2 PACKAGE
RV-47
FCV-360
TCV-27
RETURN HEADER "B"
269-B
RETURN HEADER "C"
280-B
269-B
RETURN HEADER "A"
280-A
RESIDUAL H.X. 1-2
269-A
RES. HEAT REM. PP 1-2 SEAL WTR. CLR.
CENTRIFUGAL CHARGING PUMP 1-2 PACKAGE CLRS.
SAFETY INJECTION PP 1-1 COOLER
REACTOR CONTAINMENT FAN COOLERS
08.09.81 ADDED CL. 3 CHGS OF REV. 9 & 10
REF DWG: CCW SYST 102014 REV. 9 SHT. 6
HEADER "B" COMPONENTS
UNIT - 1
P.G.&E.CO.
SHEET NO 27 OF 41 SHEETS
DRAWING NUMBER 102028
CHANGE 10

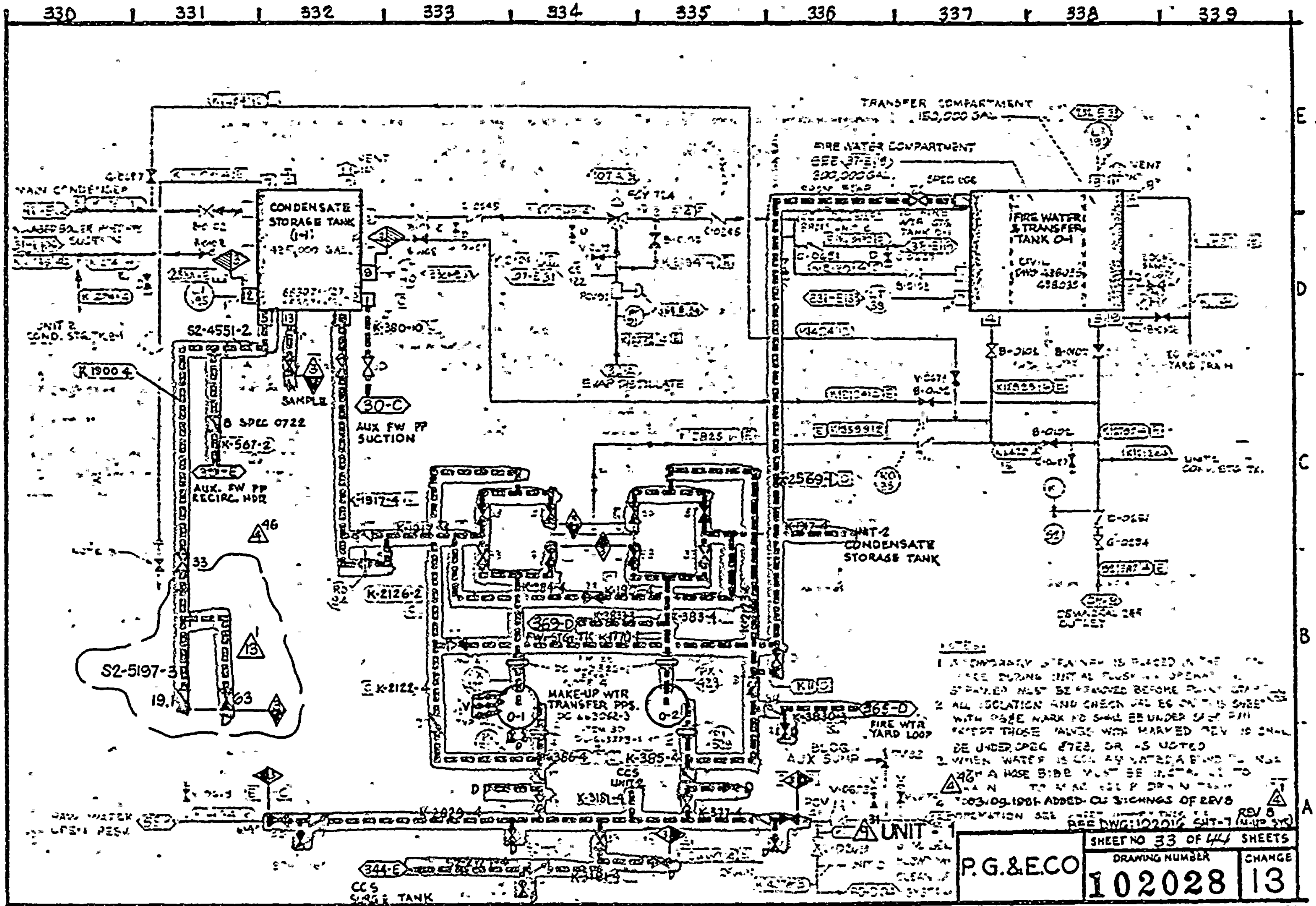

280
281
282
283
284
285
286
287
288
289
VITAL SERVICE SUPPLY HEADER "A"
279-E
290-E
MISC. SERVICE SUPPLY HEADER "C"
RV-302
RV-303
RV-191
SAMPLE PANEL 1-1 PACKAGE
COOLERS 3C
FLUID DRIVE OIL COOLER
LUBE OIL COOLER
RETURN HEADER "C"
279-A/B
RETURN HEADER "A"
290-A
WASTE GAS COMPRESSORS 1-1, 0-1
SEAL WATER COOLERS
CENTRAL SAMPLE PANEL 1-1
COOLERS
RECIPROCATING CHARGING
PUMP 1-3 COOLERS
UNIT - 1
HEADER "C" COMPONENTS
P.G.&E.CO.
DRAWING NUMBER
102028
CHANGE
9


290
291
292
293
294
295
296
297
298
299
289-E
300-E
293-A
REACTOR COOLANT PUMPS
REACTOR VESSEL SUPPORT COOLERS
293-E
289-A/B
RETURN HEADER 'C'
RETURN HEADER 'A'
HEADER "C" COMPONENTS
300-A/B
UNIT - 1
29137-41
03.09.81 ADDED CL. 3 CHGS OF REV. 9&10
REF. DWG: CW SYST. 102041 REV 9; SHT 7
P. G. & E. CO.
SHEET 29 OF 44 SHEETS
DRAWING NO. 102028
CHANGE 9


300
301
302
303
304
305
306
307
308
309
VITAL SERVICE HEADER "A"
K-103-20
298-E
310-E
MISC SERVICE HEADER "C"
K-2278-18
UNIT 1
UNIT 2
K-148-10
30 ROOT
K-149-10
RETURN HEADER "C"
K-2281-18
298-A
310-A
RETURN HEADER "A"
K-81-20
RV-304
RV-305
FCV 307
NOTE 1
FCV-1307
NOTE 1
HOT LEG LOOP HX
PRESSURIZER STM HX
PRESSURIZER LIQ. SPACE HX
RV-194
RV-187
RV-188
FUTURE
BORIC ACID EVAPORATOR PACKAGE COOLERS
AUX. STEAM DRAIN RECEIVER VENT COND
WASTE CONCENTRATOR PACKAGE COOLERS
NSSS SAMPLE HEAT EXCHANGER
UNIT - 1
29442 03 09.81 ADDED (3) CHGS OF RSV. TO
REF DWG 102014 SHT-8 (CW SYSTEM) REV 8
HEADER "C" COMPONENTS
P.G.&E.CO.
SHEET NO 30 OF 44 SHEETS
DRAWING NUMBER
102028
CHANGE
9
AM INDEXED REV. 9
M NEG

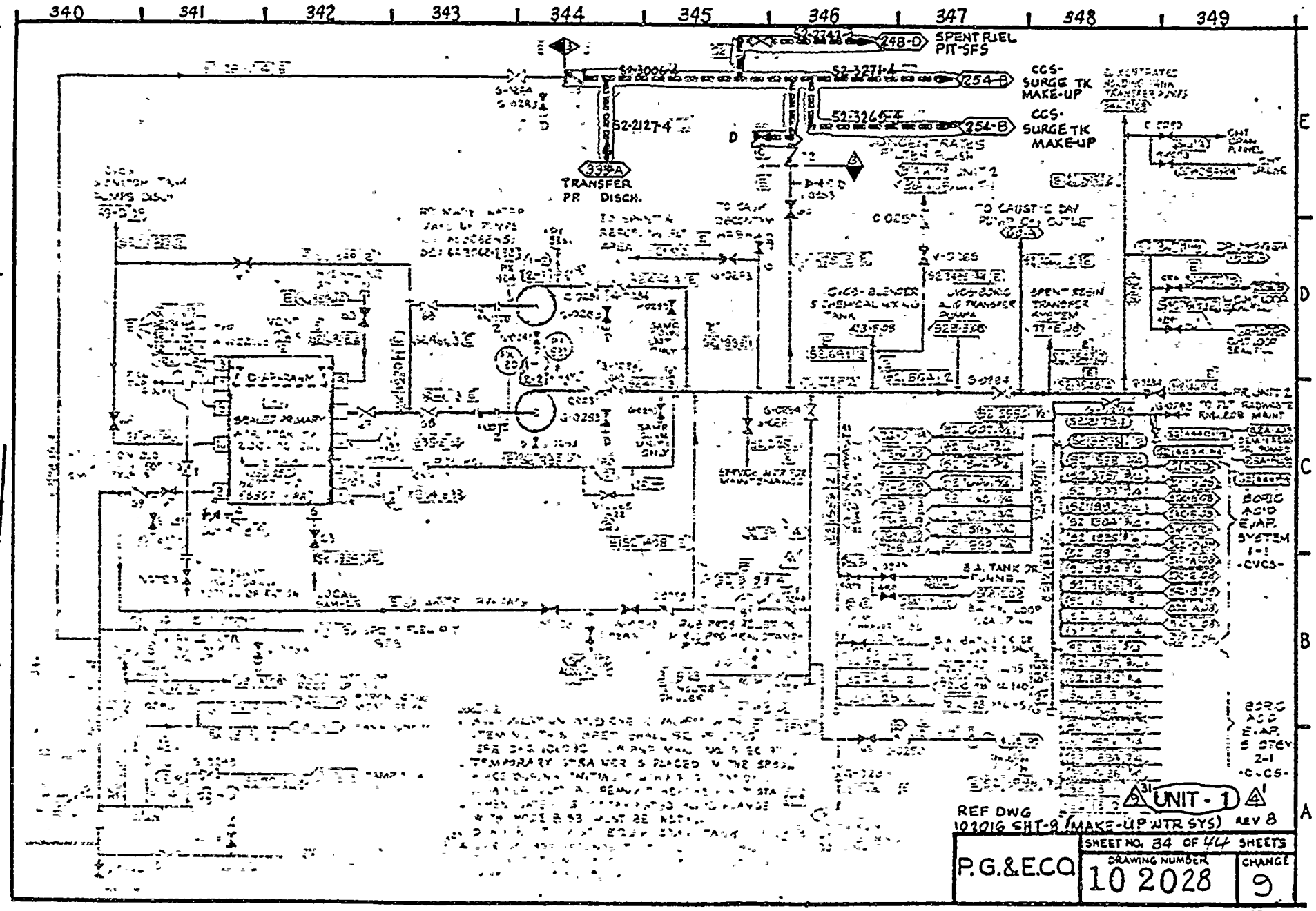

310
311
312
313
314
315
316
317
318
319
VITAL SERVICE SUPPLY HEADER "A"
309-E
320-E
MISC SERVICE SUPPLY HEADER "C"
RETURN HEADER "C"
309-A
RETURN HEADER "A"
320-A
FLOW FUSE
SC-54
SC-55
TYP
RV-52
INSIDE CONTAINMENT
BLOWDN TK VENT
RE-27
CONDENSER
(FOR RE-27)
RV-55
RV-49
RV-189
TCV-130
FE 146
RO 209
FE 147
RO 210
TV 220
TCV 361
TV 4V
SEAL WATER HEAT EXCHANGER
LETDOWN HEAT EXCHANGER
STEAM GENERATOR BLOWDOWN SAMPLE COOLERS FOR RADIATION MONITORS
SPENT FUEL PIT HEAT EXCHANGER
EXCESS LETDOWN HEAT EXCHANGER
03.09.81 ADDED A. 283 CHGS OF REV. 9 & 10
HEADER "C" COMPONENTS
UNIT - 1
P.G.&E.CO.
SHEET NO. 31 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 9
RM INDEXED REV 2
DWN PIT 1-5-79

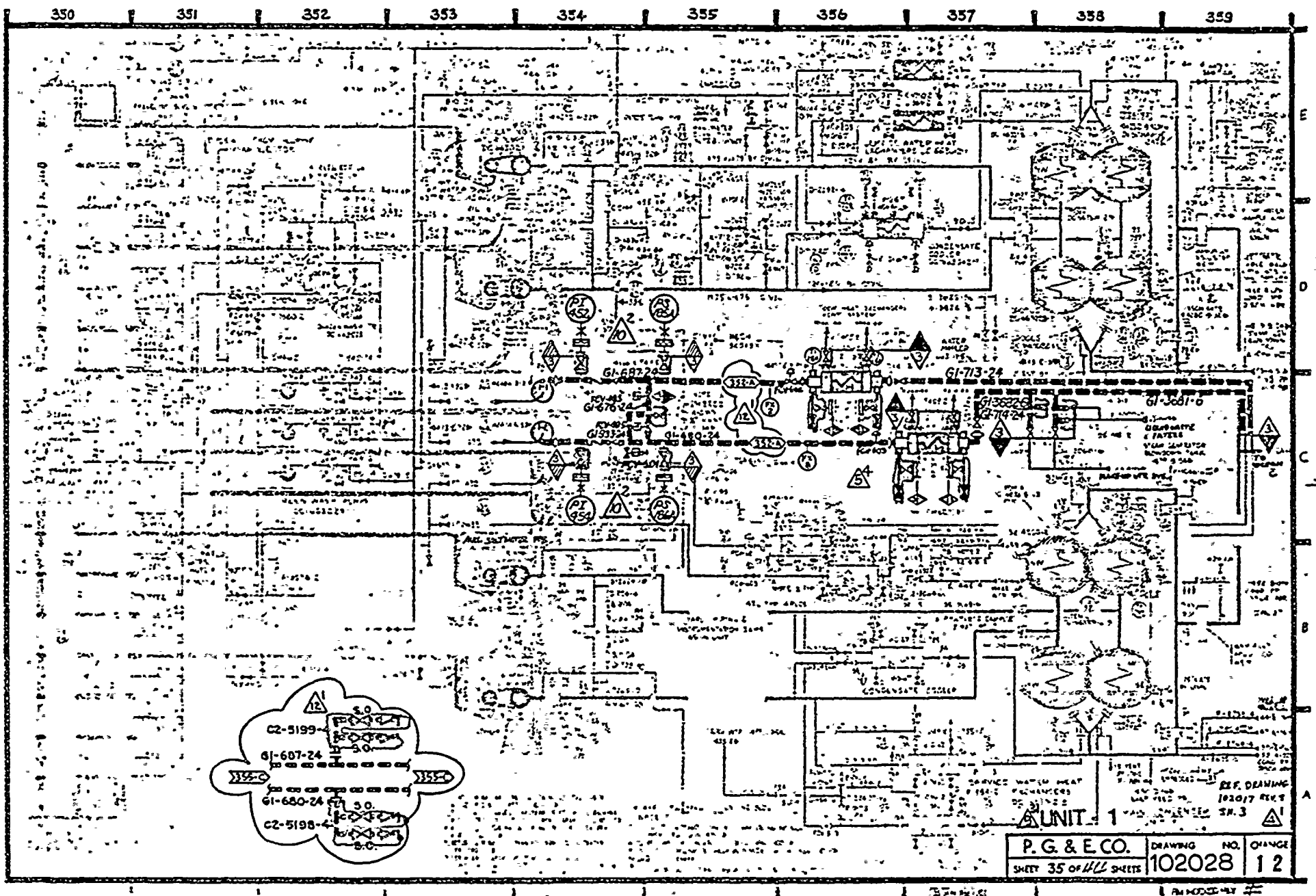

320
321
322
323
324
325
326
327
328
329
319-E
319-A
VITAL SERVICE SUPPLY HDR "A"
RETURN HEADER "A"
TO POST-LOCA SAMPLING SYSTEM COOLERS
SYSTEM-1 L.O. GEAR OIL COOLERS 1-1
SYSTEM-2 SEAL CLRS 1-1A 1-1B
CENTRIFUGAL CHARGING PUMP 1-1 PACKAGE
RV-46
FCV 365
SEAL WTR COOLERS
OUTSIDE CONTAINMENT
INSIDE CONTAINMENT
LOOP 2 COOLING COILS TYP
CONTAINMENT WALL
FCV-366
FAIL OPEN ON SI SIGNAL
TCV-28
CENTRIFUGAL CHARGING PP 1-1
RESIDUAL HEAT EXCHANGER 1-1
RHR PP 1-1 SEAL WTR CLR
SAFETY INJECTION PUMP 1-2
REACTOR CONTAINMENT FAN COOLERS
FAN COILS
HEADER "A" COMPONENTS
UNIT - 1
REF DWG 102014 SHT-10 (CW SYSTEM)
REV 8
03-09-81 ADDED CLASS CHGS OF REV 10
P.G.&E.CO.
SHEET NO 32 OF 44 SHEETS
DRAWING NUMBER 102028
CHANGE 10
RM INDEXED REV. 10



RM INDEXED REV. 13

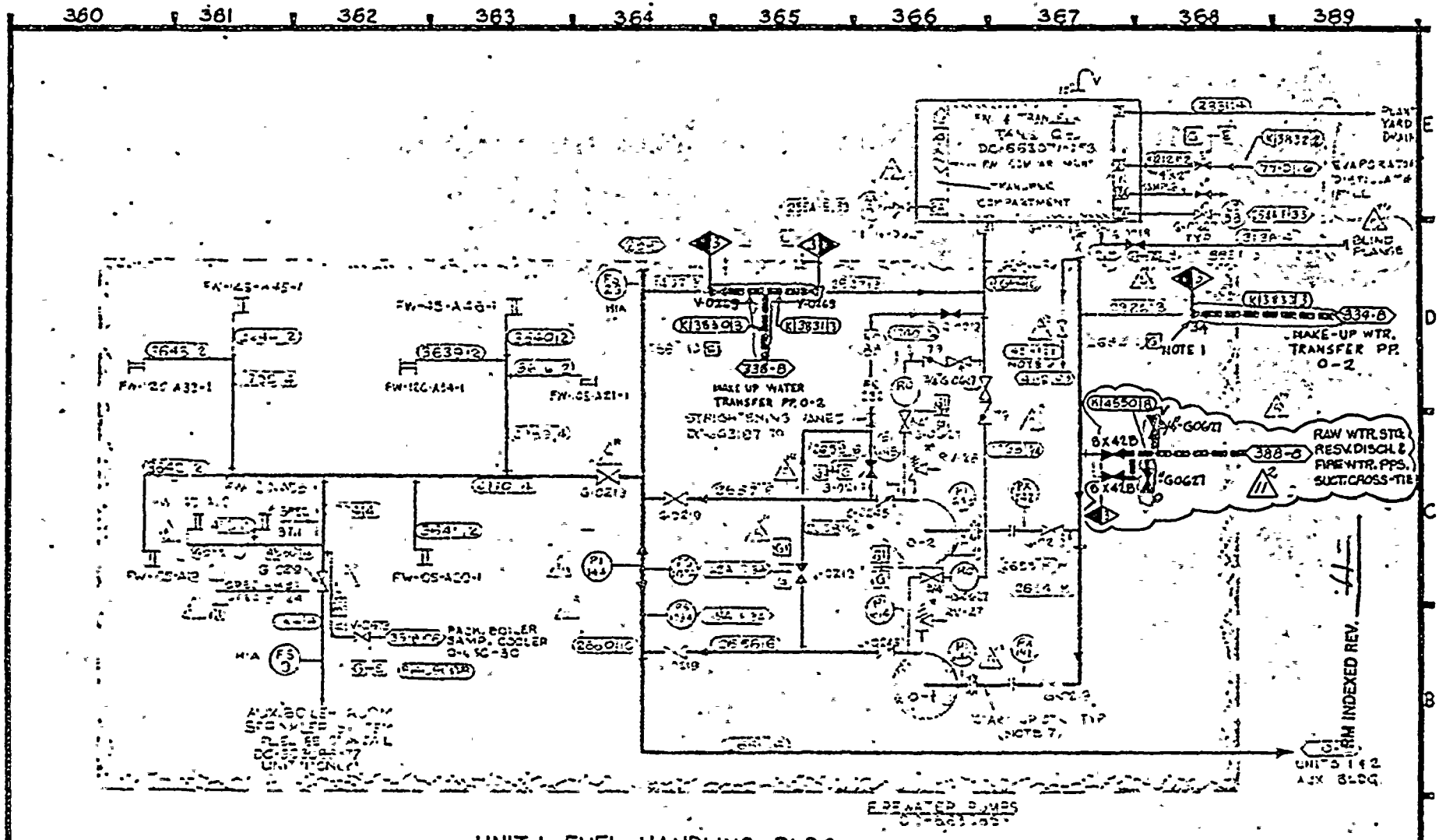
NEG 13

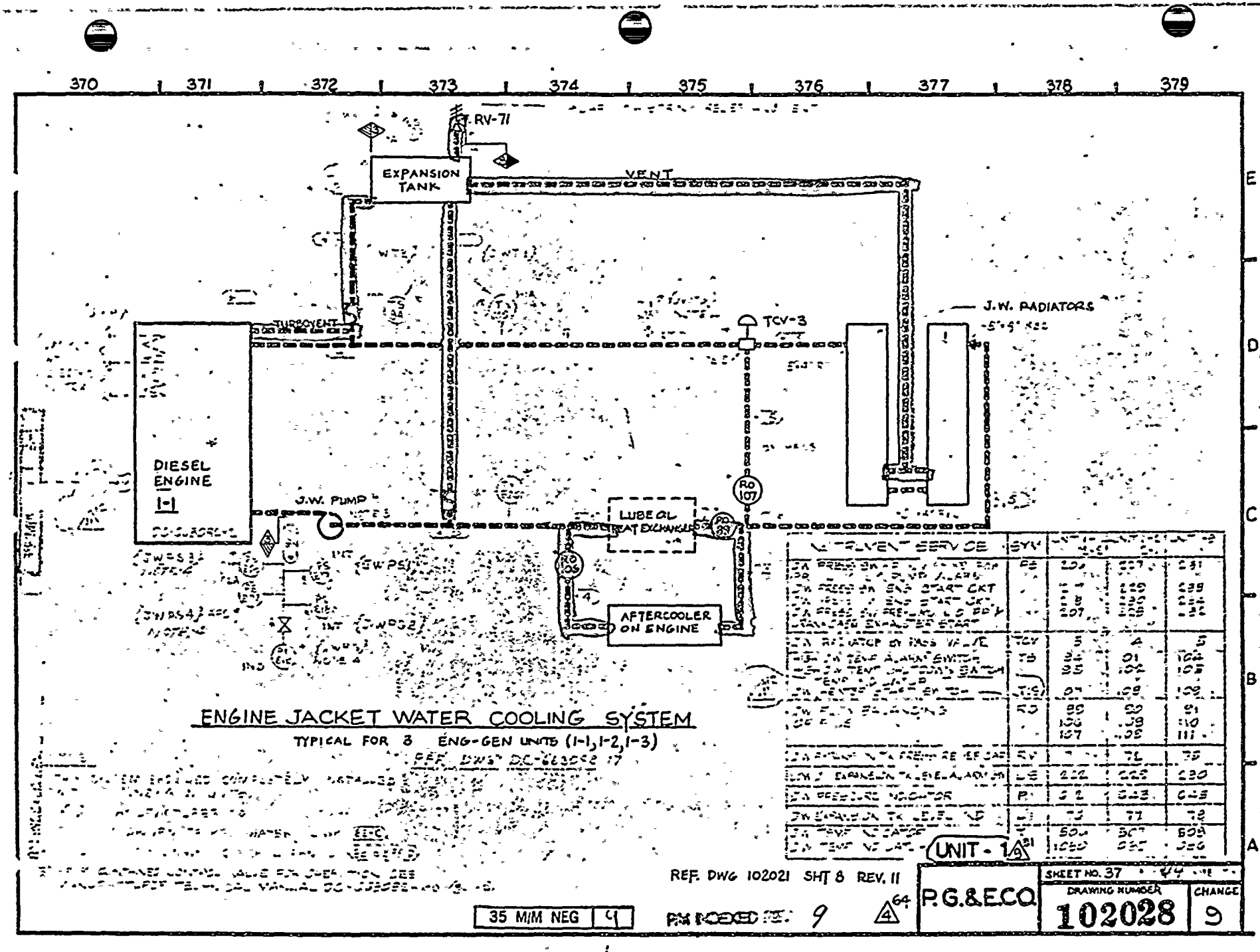

340
341
342
343
344
345
346
347
348
349
SPENT FUEL PIT-SFS
CCS-SURGE TK MAKE-UP
CCS-SURGE TK MAKE-UP
TRANSFER PR DISCH.
TO CAUST-C DAY TANK OUTLET
SPENT RESIN TRANSFER SYSTEM
BORIC ACID EVAP. SYSTEM 1-1 -CVCS-
BORIC ACID EVAP. SYSTEM 2-1 -CVCS-
UNIT - 1
REF DWG 102016 SHT-8 (MAKE-UP WTR SYS) REV 8
SHEET NO. 34 OF 44 SHEETS
P.G.&E.CO.
DRAWING NUMBER 10 2028
CHANGE 9
RM INDEXED REV. 9
W NEG 9

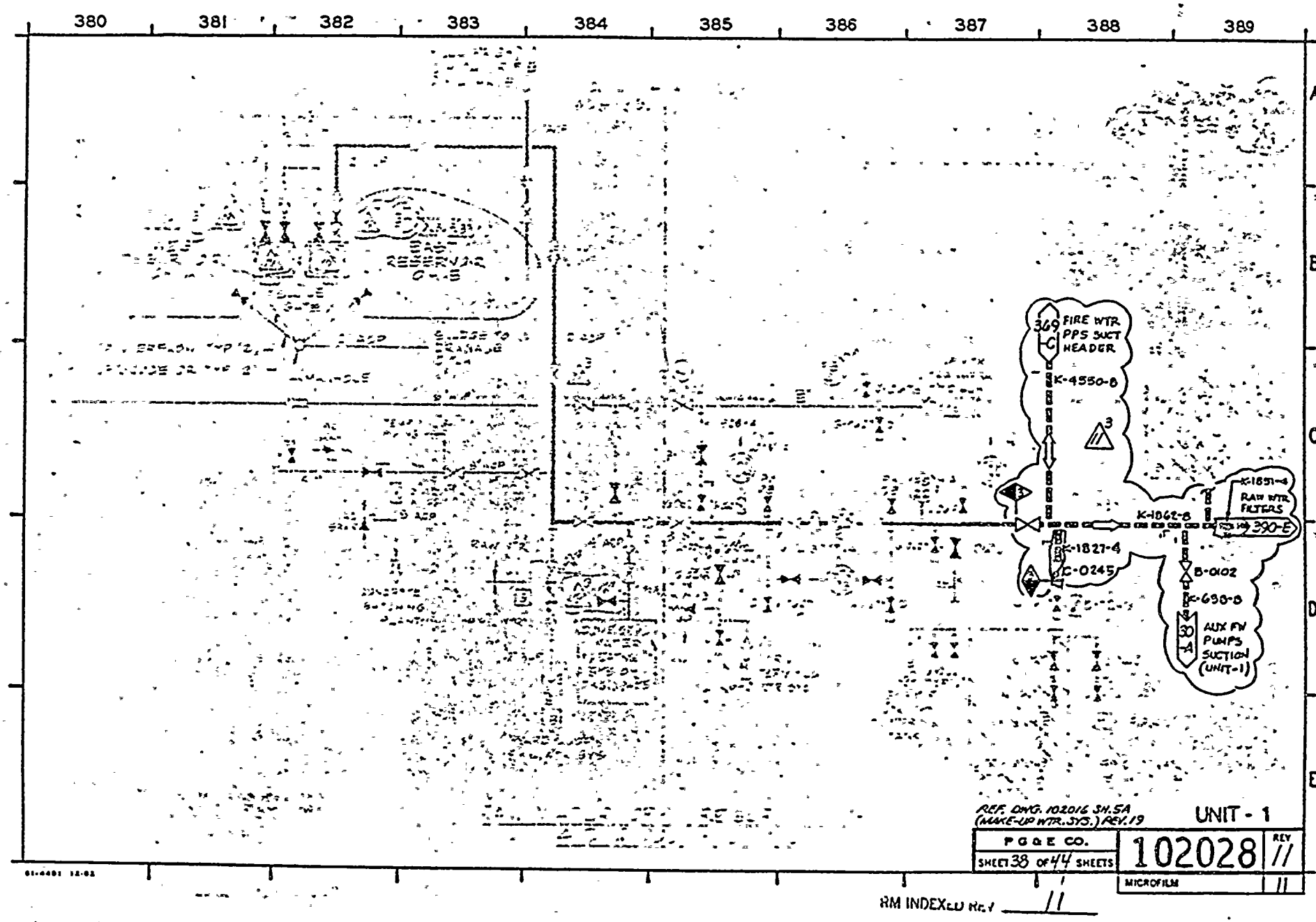


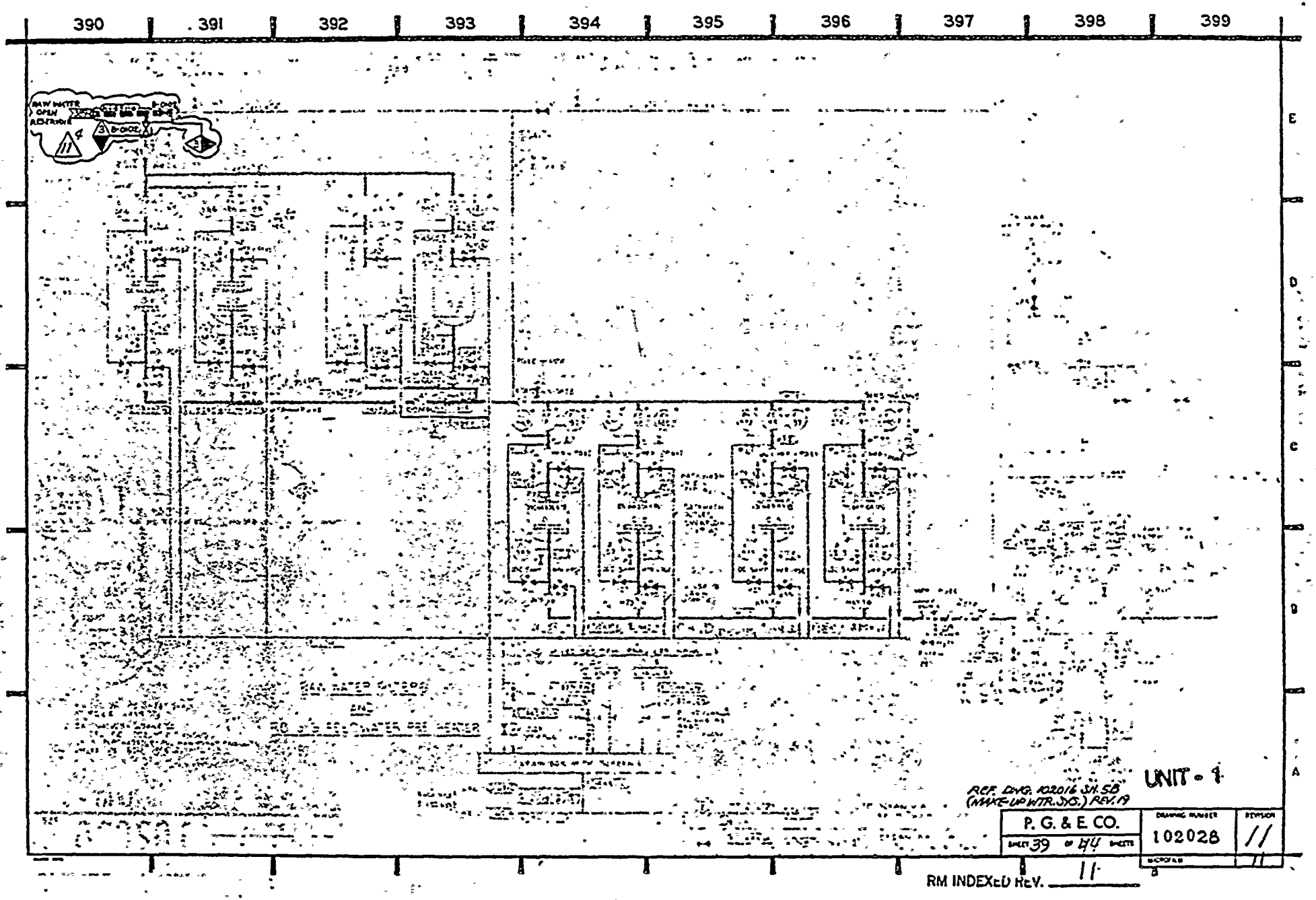
35 M/M NEG— 12

RM INDEXED REV. 12


360
361
362
363
364
365
366
367
368
369
E
D
C
B
A
MAKE UP WATER TRANSFER PP. 0-2
MAKE-UP WTR. TRANSFER PP. 0-2
NOTE 1
RAW WTR. STG. RESV. DISCH. & FIRE WTR. PPS. SUCT. CROSS-TIE
8"X42"B
6"-GOG21
388-6
336-8
339-8
BLIND FLANGE
PLANT YARD DRAIN
EVAPORATOR DISTILLATE
AUX. BOILER ROOM SPRINKLER
PASS. BOILER SAMP. COOLER
UNIT 3 & 2 AUX. BLDG.
FROM INDEXED REV.
UNIT 1 FUEL HANDLING BLDG.
UNIT - 1
P.G.&E.CO.
DRAWING NUMBER 102028
SHEET NO. 36 OF 44 SHEETS
CHANGE 11


370
371
372
373
374
375
376
377
378
379
E
D
C
B
A
RV-71
EXPANSION TANK
VENT
TURBOVENT
TCV-3
J.W. RADIATORS
DIESEL ENGINE 1-1
J.W. PUMP
LUBE OIL HEAT EXCHANGER
AFTERCOOLER ON ENGINE
ENGINE JACKET WATER COOLING SYSTEM
TYPICAL FOR 8 ENG-GEN UNITS (1-1, 1-2, 1-3)
REF. DWG DC-663062 17
REF. DWG 102021 SHT 8 REV. 11
UNIT - 1
35 M/M NEG
P.G.&E.CO.
SHEET NO. 37
DRAWING NUMBER
102028
CHANGE
9


380
381
382
383
384
385
386
387
388
389
A
B
C
D
E
EAST RESERVOIR
369
FIRE WTR PPS SUCT HEADER
K-4550-8
K-1851-4
RAW WTR FILTERS
K-1842-8
390-E
K-1821-4
C-0245
B-0102
K-690-8
AUX FW PUMPS SUCTION (UNIT-1)
REF. DWG. 102016 SH.5A (MAKE-UP WTR. SYS.) REV. 19
UNIT - 1
PG&E CO.
SHEET 38 OF 44 SHEETS
102028
REV 11
MICROFILM
11
RM INDEXED Rev 11


390
391
392
393
394
395
396
397
398
399
E
D
C
B
A
UNIT - 1
RCF. DWG. 102016 SH. 5B
(MAKE-UP WTR. SYS.) REV. 19
P. G. & E. CO.
SHEET 39 OF 44 SHEETS
DRAWING NUMBER
102028
REVISION
11
RM INDEXED REV. 11

LEGEND FOR NDE EXEMPTION COLOR CODING

1. COLOR CODING USED IN IDENTIFYING COMPONENTS EXEMPT FROM NDE

   A. CLASS 1 EXEMPTION CRITERIA:

   (BLUE) COMPONENT CONNECTIONS, PIPING, AND ASSOCIATED VALVES (AND THEIR SUPPORTS) ARE ONE-INCH NOMINAL PIPE SIZE AND SMALLER.

   B. CLASS 2 EXEMPTION CRITERIA:

   (GREEN) [1] COMPONENTS OF SYSTEMS OR PORTIONS OF SYSTEMS THAT DURING NORMAL PLANT OPERATING CONDITIONS (1) ARE NOT REQUIRED TO OPERATE OR PERFORM A SYSTEM FUNCTION BUT REMAIN FLOODED UNDER STATIC CONDITIONS AT A PRESSURE OF AT LEAST 80% OF THE PRESSURE THAT THE COMPONENT OR SYSTEM WILL BE SUBJECTED TO WHEN REQUIRED TO OPERATE: OR

   (RED) [2] COMPONENTS OF SYSTEMS OR PORTIONS OF SYSTEMS, OTHER THAN RESIDUAL HEAT REMOVAL SYSTEMS AND EMERGENCY CORE COOLING SYSTEMS, THAT ARE NOT REQUIRED TO OPERATE ABOVE A PRESSURE OF 275 PSIG (1900kPa) OR ABOVE A TEMPERATURE OF 200 (93C) F; OR

   (YELLOW) [3] COMMPONENT CONNECTIONS (INCLUDING NOZZLES IN VESSELS AND PUMPS), PIPING AND ASSOCIATED VALVES, AND VESSELS (AND THEIR SUPPORTS) THAT ARE 4 IN. NOMINAL PIPE SIZE AND SMALLER.

   C. CLASS 3 EXEMPTION CRITERIA:

   (BLACK) COMPONENT CONNECTIONS, PIPING AND ASSOCIATED VALVES (AND THEIR SUPPORTS) THAT ARE FOUR INCH NOMINAL PIPE SIZE AND SMALLER.

(1) NORMAL CONDITIONS INCLUDE OPERATING CONDITIONS DURING REACTOR STARTUP, OPERATION AT POWER, HOT STANDBY, AND REACTOR COOLDOWN TO COLD SHUTDOWN CONDITIONS. TEST CONDITIONS ARE EXCLUDED.

35 M,M NEG //

RM INDEXED REV //

5 4 68 UNIT - 1 31

P.G.&E.CO.	SHEET NO (40) OF 414 SHEETS	
	DRAWING NUMBER 102028	CHANGE //

EQUIPMENT OR SYSTEM	DESCRIPTION	CO-ORDINATES
	CHANGE 01 NOVEMBER 2, 1973	
	BY BANC/GUZMAN/WALTHER	
	ISSUED FOR INFORMATION	
	CHANGE 1 MAY 25, 1972	
	BY BANC/GUZMAN/WALTHER	
INSERVICE INSP. OF NUCLEAR REACTOR	REVISED-UP-DATED AND REDRAWN ALL SHEETS	ALL SHEETS
COOLANT SYSTEM BOUNDARY SCHEMATIC	ADDED-SHEET 33 TO SYSTEM	
	ISSUED FOR: REFLECTIVE INSULATION SPEC 8748 : CONVENTIONAL OR MASS INSERMAL INSULATION SPEC. 8737	
	CHANGE 2 MARCH 23, 1973 (ISSUED 4-3-73)	
	BY ISAAC/MANALAC/OCANA	
RCS COLD LEG LOOP 2	REVISED-RTD MANIFOLD TAKE OFF LINE NO. 3146 HAS 3446	37-E
PRESSURIZER POWER RELIEF VALVE INLET	DELETE-INSULATION SPEC (SPL) TO LINE NO. 2272 BETWEEN PCV-455C AND 8000B	50-C
	ADDED-LINE NO. 2271 BETWEEN PCV-474 AND 8000A, LINE NO. 2295 BETWEEN PCV-456 AND 8000C. LINE SECTIONS ARE BARE PIPES.	51-C
RCS LETDOWN	REVISED-REACTOR COOLANT SYSTEM BOUNDARY BY EXTENDING BOUNDARY FROM LCV-459 TO LCV-460 LINE SECTION INSULATION SPEC NOW SPC HAS IV	70-C
	ADDED-LINE NO. 56-24-3V TO PIPE SECTION BETWEEN LCV-460 AND REGENERATIVE HEAT EXCHANGER	71-C
RCS LOOPS BORON INJECTION	REVISED-REACTOR COOLANT SYSTEM BOUNDARY BY EXTENDING BOUNDARY TO CHECK VALVE 8820 FROM VALVE 8900A AT LOOP 1, VALVE 8000B AT LOOP 2, VALVE 8000C AT LOOP 3 AND, VALVE 8000D AT LOOP 4	(120-E)(121-E) (120-D)(121-D) (120-C)(123-C)
RCS LOOPS 3 AND 4 SAFETY INJECTION	REVISED-REACTOR COOLANT SYSTEM BOUNDARY BY EXTENDING BOUNDARY FROM VALVES 8949 C TO 8905 C 8949 D TO 8905 D	(130-D)(131-D)
	CHANGE 3 SEPTEMBER 1979	
	BY L TONGSON/M GUZMAN/J RAGGIO	
	REDRAN ALL SHEETS & REVISED AS LISTED BELOW	
	REDRAN SHEET COMPARISON	
	OLD 1 2a 3 4 5 6 7 8 9 10 11 12,13 9 14A NEW 1 2a 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 — 9 31 32	
	REVISED-TO "ASME CODE CLASS BOUNDARIES FOR INSERVICE INSPECTION & TESTING PROGRAM", UNIT 2: DAS "INSERVICE INSPECTION OF NUCLEAR REACTOR COOLANT SYSTEM BOUNDARY SCHEMATIC" UNIT 1 & 2.	SHT 1
BASIC FLOW DIAGRAM	REVISED-TO DEPICT ADDED SYSTEMS, AS LISTED BELOW.	SHT 1
	LINE SYMBOL FOR ASME CODE CLASS 1,2,3 AND NON-CLASS, WERE SHOWN AS HAVY SOLID & LIGHT LINES FOR ONLY 2 CLASSES.	
	ADDED- CODE CLASS 1,2,3 AND NON-CLASS BOUNDARY AND SYMBOL.	
	CONTAINMENT PENETRATION NO. & DRG. (THIS DWG) SHEET NO FOR-IN.	
	SIGNIFICANT VALVES (MOSTLY FOR CODE CLASS BOUNDARY CHANGE)	
	CLASS ZONE KEY PLAN	
	NOTES 1 & 2 (INTENT OF THIS DWG INSERVICE INSPECTION DESIGN APPLICATION)	
	LEGEND & SYMBOL	
LINE CODES GENERAL NOTES INDEX	REVISED-FROM 2 TO 3 CLASSES	SHT 2
	ADDED- PLANT SYSTEM CROSS REFERENCE BETWEEN INSERVICE INSPECTION SHEET NO. AND PIPE SCHEMATIC SHEET NO.	SHT 2
SYSTEM SCHEMATICS	ADDED- FEED WATER TURBINE STEAM AUXILIARY STEAM CVCS (BORIC ACID MC,DP,EVAP & CHARG-PPS)	SHTS 3,4 5,6,7 8 15,16,17,18

EQUIPMENT OR SYSTEM	DESCRIPTION	CO-ORDINATES
SYSTEM	RHR (PUMP DETAIL)	23
	CONTAINMENT SPRAY	25
	SPENT FUEL PIT COOLING	26
	CCR	27 36
	MAKE-UP HTR	35,36
	SALT HTR	37
	FIRE PROTECTION	38,39
	DIESEL ENGINE GEN	42 48
	VENTILATION & AIR CONDITIONING	49,50
	COMPRESSED AIR	51
REVISED-	CODE CLASS PRESENTATION OF LINE TO DEPICT ASME CODE CLASS 1,2,3 AND NON-CLASS INSERVICE INSPECTION FOR THE FOLLOWING SCHEMATIC SYSTEMS.	
	REACTOR COOLANT	SHTS 9,10,11
	CHEM & VOLUME CONTR.	12,13,14
	SAFETY INJECTION	19,20,21
	RESIDUAL HEAT REMOVAL	22
	NUCLEAR SAMPLING	24

CHANGE 4 MAY 12, 1980

BY: J.Z. BYCZYNSKI/L.V. MANALAC/R.S. BACCO

REVISION NUMBERS OF "PARENT" PIPING SCHEMATICS ADDED TO ALL INSERVICE INSPECTION SCHEMATICS. ALL CHANGES "CLOUDED" AND "TRIANGLED". △1

CHANGES LISTED BELOW ARE THE RESULT OF "PARENT" PIPING SCHEMATICS CHANGES: △2 THRU △46

"PARENT" PIPING SCHEMATIC DWG NO.	SHEET	CHG'D	INSERV. INSPECT. DWG NO. 102028 CHG'D	SHEET
102003	4	△1	△1	5
		△1	△1	
		△1	△1	
		△1	*△1	
		△1	△1	
		△1	△1	
		△1	△1	
		△1	△1	
	4A	△1	△1	4
102004	3	△1	△1	5
	5	△1	△1	6
		△1	△1	
102007	3	△1	*△1	9
	4	△1	△1	10
102008	3	△1	△1	12
	4B	△1	△1	14
		△1	△1	
	5B	△1	△1	15
102009	3	△1	△1	18
	4	△1	△1	20
102010	3	△1	△1	22
102012	3	△1	△1	25
		△1	△1	
102014	5	△1	△1	27
		△1	△1	

"PARENT" PIPING SCHEMATIC DWG NO.	SHEET	CHG'D	INSERV. INSPECT. DWG NO. 102028 CHG'D	SHEET
102014	5	△1	△1	27
	6			29
	6A			30
	7			31
	8			32
	9			33
	10			34
	5	△1	△1	27
	10			34
	5A	△1	△1	28
	6	△1	△1	29
		△1	△1	
	6A	△1	△1	30
	7	△1	△1	31
		△1	△1	
		△1	△1	
	8	△1	△1	32
	9	△1	△1	33
		△1	△1	
		△1	△1	
102016	7	△1	△1	35

* NOTE: △3, △4 AND △47 NOT USED

INDEXED REV 9

EQUIPMENT OR SYSTEM	DESCRIPTION	CO-ORDINATES
AUX. FEEDWTR PUMP 3-1	DELETED-¾-3/4 PIPE FROM TCV-8 & TCV-9 FOR THE PUMP THRUST AND REAR BEARING COOLING (PER DCO-EM-940 OF 3-10-83)	SHT. 8 △48
PRESSURE RELIEF TANK 3-1	DELETED-TANK-GAS ANALYZER PIPING AT PENETRATION 76, NITROGEN SUPPLY LINE AT PENETRATION 52 AND PRIMARY WATER SUPPLY AT PENETRATION 52. (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 10 △49
LETDOWN HEAT EXCHANGER 3-1	DELETED-COMPONENT COOLING WATER DUPLICATION, SHOWN ON SHEET 33. (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 13 △50
SEAL WATER HEAT EXCHANGER 3-1	DELETED-COMPONENT COOLING WATER DUPLICATION SHOWN ON SHEET 33. (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 14 △51
CENTRIFUGAL CHARGING PUMPS	DELETED-LUBE AND GEAR OIL PORTIONS (NOT IN CODE) (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 17 △52
ACCUMULATOR TANKS	DELETED-NITROGEN SUPPLY LINES AT PENETRATION 53 (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 19 △53
	DELETED-ACCUMULATOR SAMPLE LINE BETWEEN VALVES 93578 AND 93578 THRU PENETRATION 59. (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT. 24 △54
SPENT FUEL PIT HEAT EXCHANGER	DELETED-COMPONENT COOLING WATER DUPLICATION SHOWN ON SHEET 33. (PER DCO-EM-942 REV. 1 OF 3-26-83)	SHT 26 △55
STEAM GENERATOR	DELETED-CONTAINMENT NITROGEN SUPPLY HEADER THRU PENETRATION 52. (PER DCO-EM-942 REV 2 OF 4-17-83)	SHT. 6 △56
MAIN STEAM TO AUX. FW PP TURB.	REVISED-ABANDONED IN PLACE FCV-95 BYPASS LINE (FCV-129 AND THROTTLE VALVE) (PER DCI-EM-979 OF 4-15-83)	SHT. 6 △57
PRESSURIZER RELIEF TANK	DELETED-RV OUTLET HEADER TO PRESS. RELIEF TANK THRU PENETRATION 71. (NOT IN CODE) (PER DCO-EM-942 REV. 2 OF 4-17-83)	SHT. 10 △58
CHARGING PUMPS	DELETED-CHARGING PUMPS SUCTION HEADER RELIEF VALVE OUTLET (LINE 3458)(NOT IN CODE) (PER DCO-EM-942 REV. 2 OF 4-17-83)	SHT. 14 △59
SIS PUMPS AND RESIDUAL HEAT EXCHANGER	DELETED-SIS PUMP SUCTION HEADER RV OUTLET (LINE 2063), SIS PUMP DISCH. RV OUTLET (LINES 2372,3463,3152) AND RESIDUAL HEAT EXCHANGER OUTLET RV DISCH. (LINES 2003,2004) (NOT IN CODE) (PER DCO-EM-942 REV. 2 OF 4-17-83)	SHT 21 △60
CONT. SPRAY PPS	DELETED-CONTAINMENT SPRAY PUMP DISCH RV OUTLET HEADER (LINES 272,273,2518) (NOT IN CODE) (PER DCO-EM-942 REV. 2 OF 4-17-83)	SHT 25 △61
SPENT FUEL PIT	DELETED-FUEL TRANSFER TUBE TO REFUELING CANAL (NOT IN CODE) (PER DCO-EM-942 REV. 2 OF 4-17-83)	SHT 26 △62
SHEETS 8,16 & 18	REVISED-NO LONGER APPLICABLE TO INSERVICE INSPECTION CODES, BUT REMAIN IN AS BUILTS TO AVOID SHEET RENUMBERING CAUSE REF. COMPLICATIONS. (PER DCO-EM-942 REV. 1 OF 3-26-83)	△63
SHEET 39	DELETED-SHEET 39 REV. 3 REF. 102018 SHT. 7 ADDED -SHEET 39 REV. 4 REF. 102023 SHT. 8	△64
SHEETS 40 THRU 81	DELETED-FROM END OF THE DRG AS NO LONGER APPLICABLE TO INSERVICE INSPECTION CODES. (PER DCO-EM-942 REV. 2 OF 4-17-83)	△65
SHEET 2 COLOR CODING LEGEND TABLE OF CHANGES SHEET	REVISED-PER DESCRIPTIONS IN ITEMS 63 THRU 65 ABOVE. ADDED BY DEPT OF ENGR RESEARCH SHEET 40 REVISED-SHEET NUMBER FROM 53 TO 44	△66 △67 △68

UNIT - 1 △31 (9)

P. G. & E. CO.	DRAWING NUMBER	REVISION
SHEET 41 2 OF 41 SHEETS	102028	//
	MICROFILM	5

INDEX // P...

EQUIPMENT OR SYSTEM	DESCRIPTION	CO-ORDINATES
	CHANGE 5 AUG. 28, 1981.	
	BY: J.Z.BYCZYNSKI, L.V.MANALAC, R.S.BREED.	
SHEETS 8,16,18.	DELETED - BLANK SHEETS. (PER DCO-EM-1075 REV.1 OF 8-26-81)	
SHEET NUMBERING, CROSS REFERENCE.	REVISED - AS RESULT OF ITEM ABOVE. (PER DCO-EM-1075 REV.1 OF 8-26-81)	

SHEET NUMBERS COMPARISION:

CHANGE 4	OLD	1	2	3	4	5	6	7	8	9	-	10	11	12	13	14	15	16	17	18	19	20	21	22
CHANGE 5	NEW	1	2	3	4	5	6	7	-	8	9	10	11	12	13	14	15	-	16	-	17	18	19	20

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	-			
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			

REACTOR VESSEL VENT SYSTEM	DELETED - LINES, VALVES, INSTRUMENTS AND ASME CODE CLASS BOUNDARY.	SHT.8	5/1
REACTOR VESSEL LEVEL INSTR. AND VENT SYSTEMS	ADDED - LINES, VALVES, INSTRUMENTS AND ASME CODE CLASS BOUNDARIES. (PER DCO-EM-569 OF 3-21-80, DCO-EM-809 OF 9-25-80, DCO-EM-809 REV.2 OF 12-15-80)	NEW SHT.9	5/2
STEAM GENERATOR BLOWDOWN TANK VENT CONDENSER FOR RE-27	ADDED - COOLING WATER SUPPLY FLOW FUSE, THROTTLED COOLING WATER RETURN VALVE AND RELOCATED CODE CLASS BOUNDARIES FROM CONDENSER NOZZLES TO FLOW FUSE OUTLET AND RETURN FLOW CHECK VALVE INLET. (PER DC1-EM-981 OF 4-17-81)	SHT.31	5/3
CCW HEAT EXCHANGERS	ADDED - DIFFERENTIAL PRESSURE SENSING LINES CONNECTIONS TO DRAIN LINES FROM NOZZLES N3 AND CODE CLASS BOUNDARIES. (PER DCO-EM-1025 REV.1 OF 8-19-81)	SHT.35	5/4
TABLES OF CHANGES	ADDED - SHEET 40.		5/5
CCW SUPPLY & RETURN	REVISED - CLASS 2 ITEMS TO CLASS 3 ON:		

	THRU PENETRATION	SHT.
BASIC DIAGRAM	9 → 23	1
REACTOR CNT FAN COOLERS 1,2,5	9,10,13,14,15,18,	27
REACTOR COOLANT PUMPS	19,20,21,	29
EXCESS LETDOWN HEAT EXCHANGER	22,23,	12,31
REACTOR CNT FAN COOLERS 3,4	11,12,16,17.	32

(PER DCO-EM-1075 REV.1 OF 8-26-81) 5/6

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES
	CHANGE 6 JUNE 23, 1983.	
	BY: J.Z.BYCZYNSKI, L.V.MANALAC, R.S.BREED.	
AUXILIARY FEEDWATER PPS 2 & 3 DISCHARGE	REVISED - DISCHARGE VALVES (LCV-110, LCV-111, LCV-113 & LCV-115) NORMAL OPERATION MODE FROM NORMALLY CLOSED TO NORMALLY OPEN. (PER DCO-EM-1263 OF 3-25-82)	36,37,38-B 6/1
STEAM GENERATOR BLOWDOWN	DELETED - DUPLICATED CLASS 2 STM GEN BLOWDOWN LINES AND STM GEN BLOWDOWN SAMPLE LINES. (PER DC1-EM-1165 OF 12-30-81)	52/53-C 52/53-A 62/63-C 62/63-A 6/2
REACTOR VESSEL LEVEL INSTRUMENTS AND VENT SYSTEM	ADDED - TWO (2) VENT VALVES TO HOT LEGS 3 & 4 LEVEL INSTRUMENT TUBING, TWO (2) CALIBRATION ACCESS VALVES TO HOT LEGS 3 & 4 LEVEL INSTRUMENT BELLOWS HOUSINGS AND ONE (1) VENT VALVE TO REACTOR VESSEL HEAD LEVEL INSTRUMENT TUBING. (PER DWG 102007 REV. 10 AND DCO-EM-809 REV. 6 OF 4-24-81)	93/94-C 95-B/C 96-C/D 6/3
	CHANGE 7 DECEMBER 16, 1983.	
	BY J.BYCZYNSKI, T.ORTUA, J.ZESS & T.P.LEE	
COMPONENT COOLING WTR PUMPS	DELETED - SUCTION AND DISCHARGE CLASS 3 DRAIN PIPING. (PER DC1-OM-148 OF 10-23-81)	250-D/E 252-D/E 253-D/E 7/1
	DELETED - EXPANSION JOINT ITEM 1 IN LINE K-82-20. (PER DC1-EP-5397 OF 12-30-82)	250-C 7/2
	CHANGE 8 - DECEMBER 28, 1983	
	BY L.I.TIONGSON, T.P ORTUA, J. ZESS, T.P LEE	
EMERGENCY BORATE PIPING	ADDED VENT & DRAIN VALVES, ISOLATING VALVE ON LINE 733 & 5092 (NEW LINE) (PER DC1-EM-15477 OF 10-7-83)	143-B 8/1

UNIT - 1 9/31

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	38	40	42	44
BACK	-	3	5	-	8	-	-	-	13	15	17	-	20	-	-	-	25	27	29	31	33	-	-	-	-	39	41	43	-

RM INDEXED REV. 11 (11/5)

PG&E CO. SHEET 42 OF 111 SHEETS | 102028 | REV. 11 | MICROFILM 11

RM INDEXED REV. 2

61-4451 3-79

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES
	CHANGE 9 JAN. 31, 1984.	
	BY: L. I. TIONGSON, T. D. ORTUA, J. ZESS, T. A LEE	
CHEMICAL AND VOLUME CONTROL	REVISED – DRAIN LOCATION FROM LINE 62-1567-2 WAS DOWNSTREAM OF VALVE 8466B (PER DCI-EM-17337 REV. 1, 1-30-84)	154-A 9/1
SAFETY INJECTION PUMPS	REVISED – P1-939 CONNECTION TO PUMP SUCTION DRAIN LINE (PER DCI-EM-17347, 1-12-84)	198-D 9/2
	THE FOLLOWING REVISIONS, ITEMS 1 TO 27 AS DESCRIBED BELOW ARE PER DCN DCI-EM-17330 OF 1-11-84:	
CCW SURGE TANK	REVISED 1. DRAIN ITEM NUMBER TO 42 IN LINE 2555 (REF ISO 14-27, REV. 2)	256-C 9/3
RHR PP 1-2 SEAL WTR COOLER	DELETED 2. VENT IN LINE 122 (REF. ISO 14-209, REV. 13)	271-C 9/4
	REVISED 3. VENT ON SEAL WTR COOLER TO ITEM NUMBER 11 (REF. ISO 14-209, REV 13)	271-C 9/5
SYSTEM INJECTION PP 1-1	REVISED 4. DRAIN ITEM NUMBER TO 42 IN LINE 1927 (REF ISO 14-232, REV. 7)	275-C 9/6
	REVISED 5. VENT ITEM NUMBER TO 51 IN LINE 310 (REF. ISO 14-233, REV. 5)	275-D 9/7
CENTRAL SAMPLE PANEL	REVISED 6. DRAIN ITEM NUMBER TO 42 IN LINE 3249 (REF. ISO. 14-225, REV. 9)	285-D 9/8
RECIP. CHARGING PP 1-3	REVISED 7. VENT ITEM NUMBER TO 51 IN LINE 2397 (REF. ISO. 14-217, REV. 10)	287-C 9/9
	REVISED 8. VENT ITEM NUMBER TO 51 IN LINE 2394 (REF. ISO. 14-217, REV. 10)	287-C 9/10
	REVISED 9. DRAIN ITEM NUMBER TO 42 IN LINE 2397 (REF. ISO 14-217, REV. 10)	287-C 9/11
	REVISED 10. DRAIN ITEM NUMBER TO 42 IN LINE 2394 (REF. ISO. 14-217, REV. 10)	287-C 9/12
	ADDED 11. DRAIN IN LINE 2394 WITH ITEM 42 VALVE (REF. ISO. 14-217, REV. 10)	287-C 9/13
COOLING PLATE 1-3	REVISED 12. VENT ITEM NUMBER TO 11 IN LINE 1699 (REF. ISO. 14-257, REV. 7)	296-C 9/14
	REVISED 13. VENT ITEM NUMBER TO 11 IN LINE 394 (PER. ISO. 14-257, REV. 7)	296-C 9/15

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES
BORIC ACID EVAP. PKG.	REVISED 14. PIPING FROM HDR 2341 AS SHOWN (REF. ISO. 14-25, REV. 4)	301-B 9/16
WASTE CONC. PKG. SAMPLE COOLER.	DELETED 15. DRAIN IN LINE 1440 (REF. ISO. 14-246, REV. 3)	306-D 9/17
B.A. PKG. SAMPLE COOLER	ADDED 16. DRAIN ITEM NUMBER 42 IN LINE 3931 (REF. ISO. 14-267, REV. 6)	302-C 9/18
B.A. PKG. VENT COND	REVISED 17. VENT ITEM NUMBER TO 51 IN LINE 1762 (REF. ISO. 14-239, REV. 4)	302-C 9/19
B.A. PKG. SAMPLE COOLER	REVISED 18. VENT ITEM NUMBER TO 51 IN LINE 3930 (REF. ISO. 14-267, REV. 6)	302-D 9/20
B.A. PKG. VENT COND.	REVISED 19. VENT ITEM NUMBER TO 51 IN LINE 1761 (REF ISO. 14-239, REV. 4)	302-D 9/21
RADWASTE EVAP. PKG. VENT COND.	REVISED 20. VENT ITEM NUMBER TO 51 IN LINE 1773 (REF. ISO. 14-238, REV 8)	306-C 9/22
WASTE CONC. PKG SAMPLE COOLER	REVISED 21. VENT ITEM NUMBER TO 51 IN LINE 1441 (REF. ISO. 14-246, REV. 3)	306-B 9/23
	DELETED 22. DRAIN IN LINE 1441 (REF ISO 14-246, REV. 3)	306-C 9/24
SEAL WTR. HT. EXCHANGER 1-1	REVISED 23. DRAIN ITEM NUMBER TO 42 ON SEAL WTR HT. EXCH 1-1 (REF. ISO. 8-362, REV 4	311-C 9/25
RHR PP 1-1	REVISED 24. VENT ITEM NUMBER TO 51 IN LINE 128 (REF. ISO. 14-210, REV. 8)	325-D 9/26
CENT CHARGING PP 1-1	DELETED 25. VENT IN LINE 2354 (REF. ISO 14-217, REV. 6 & 14-206, REV. 7)	320-D 9/27
	REVISED 26. DRAIN ITEM NUMBER TO 11 IN LINE 1925 (REF. ISO. 14-207, REV. 10)	320-C 9/28
	REVISED 27. DRAIN ITEM NUMBER TO 42 IN LINE 1922 (REF ISO. 14-206, REV. 7)	320-D 9/29
SAFETY INJECTION PUMPS	REVISED – P1-938 CONNECTION TO PUMP SUCTION DRAIN LINE (PER DCI-EM-17399, 1-12-84	198-E 9/30
THIS DWG.	ADDED – UNIT 1 STAMP ON ALL SH. (FOR MICROFILM UPDATE)	SHT'S 2 THRU. 40 9/31

11/5

UNIT - 1 | P.G.&E.CO. | SHEET NO. (43) OF 44 SHEETS | DRAWING NUMBER 102028 | CHANGE 11

35 MM FILM

RM INDEXED REV. 11

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES

CHANGE 10 - MAY 10, 1984

BY: L. TIONGSON / J. BYCZYNSKI / T. ORTUA / J. ZESS

REACTOR CNT FAN MOTOR COOLERS CCW SUPPLY	ADDED - VENT VALVES TO COOLING WTR OUTLET SIDE OF COOLERS (PER AS-BUILT DCI-OM-5899 OF 2-7-83) 10/1	278/279-C 328/329-C
AUX. SALT WATER PP's DISCHARGE	REVISED - ASME CODE BOUNDARIES ON ROOT VALVES OF PI-452, PI-454, PS-185A & PS-186A (PER DCI-EJ-13733 OF 8-13-83) 10/2	354/355-C/D

CHANGE 11 - JULY 12, 1984

BY: J. BYCZYNSKI / T. ORTUA / J. ZESS

AUX. FEED PP's SUCTION FROM RAW WTR. STOR. RESERV.	REVISED - LOCATION OF INDIVIDUAL ASME CODE BOUNDARIES ON LINE 561 AND LINE 638 TOWARD RAW WATER STORAGE RESERVOIR. (PER DCO-EM-3241 OF 10-14-83) 11/1	30-A/B
RAW WTR. STORAGE RESERV. DISCH & FW PP's. SUCTION CROSSTIE	ADDED - LINE 4550 WITH ASSOCIATED VALVES & BYPASS TO ISI PROGRAM (PER DCO-EM-3241 OF 10-14-83) 11/2	368-C
MAKE-UP WATER SYSTEM	ADDED - NEW SHEET 38 TO INCLUDE LINES 4550, 1827, 1862, 638 AND 1851 INTO THE ISI PROGRAM (PER DCO-EM-3241 OF 10-14-83) 11/3	388/389-C/D SHEET 2
	ADDED - NEW SHEET 39 TO INCLUDE LINE 1851 AND LINE 1871 TAP INTO THE ISI PROGRAM (PER DCO-EM-3241 OF 10-14-83) 11/4	390/391-E SHEET 2
SHEET NUMBERING	REVISED - SHEET NUMBERING AS A RESULT OF ITEMS 11/3 & 11/4 ABOVE. SEE TABLE BELOW. 11/5	

CHG. 10 (OLD)	—	—	38	39	40	41	42
CHG. 11 (NEW)	38	39	40	41	42	43	44

SPENT FUEL PIT COOLING SYSTEM	ADDED - SPENT FUEL PIT COOLING LOOP TO INCLUDE LINES: 154, 155, 159, 1071, 1070, 2885, 1068, 156, 1069, 158 & 1067 TO THE ISI PROGRAM (PER DCI-EP-13210 R1 OF 11-8-83) 11/6	SHEET 24

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES

CHANGE 12 - AUGUST 10, 1984

BY: V. MAR / J. BYCZYNSKI / J. ZESS

AUX. SALTWATER SUPPLY LINES	ADDED - VACUUM RELIEF VALVES AND ISOLATING VALVES WITH ASME CODE CLASS 3 PIPING (C2-5198-4 & C2-5199-4) TO ASW SUPPLY LINES G1-680-24 & G1-687-24. (PER DCI-EM-3328 R2 OF 7-21-83) 12/1	355-B/C 352-A

CHANGE 13 - DEC. 20, 1984

BY: J. BYCZYNSKI / T. ORTUA / J. ZESS

CONDENSATE STORAGE TK. 1-1	ADDED - NEW CLASS 3 LINE S2-5197-3 WITH ITEM 19.1 CHECK VALVE AND ITEM G3 DRAIN VALVE TO THE ISI PROGRAM (PER DCI-EM-9311 R1 OF 9-19-83) 13/1	331-B

UNIT - 1 11/5

P.G.&E.CO. | SHEET NO. 44 OF 44 SHEETS | DRAWING NUMBER 102028 | CHANGE 13

35 M/M NEG 12

RM INDEXED REV. 13

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

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
B-A	Reactor Vessel Pressure Retaining Welds	Serial No. C.E. 66104 DWG. Ref. CE232-442-6 DC663201-38 * [1.1-1]			Exam area meets or exceeds reqts. of fig. IWB2500-1 & fig. IWB2500-2				
B1.10	Shell Welds								[*] ISI DWG Page No.'s
B1.11	-Circumferential- Upper Course (to)	Weld No.'s		(3)	(Length)				Thickness 10.75"
	Intermediate (to)	8-442	UT	1	543.5"	100%	Three	100	T = 8.6" (TO)
	Lower Course (to)	9-442	UT	1	543.5"	100%	Three	100	T = 8.6" (TO)
	Bottom Head	10-442	UT	1	As Accessible	100%	Three	100	T = 5.3" Relief No. 001
B1.12	-Longitudinal- Upper Course	Weld No.'s		(3)					
		1-442A	UT	1	99.5"	100%	Three	100	T = 10.75"
		1-442B	UT	1	99.5"	100%	Three	100	
		1-442C	UT	1	99.5"	100%	Three	100	
	Intermediate Course	Weld No.'s		(3)					
		2-442A	UT	1	108.8"	100%	Three	100	T = 8.6"
		2-442B	UT	1	108.8"	100%	Three	100	
		2-442C	UT	1	108.8"	100%	Three	100	
	Lower Course	Welds No.'s		(3)					
		3-442A	UT	1	106.5"	100%	Three	100	T = 8.6"
		3-442B	UT	1	106.5"	100%	Three	100	
		3-442C	UT	1	106.5"	100%	Three	100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 2 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
		Serial No. C.E. 66204						
B-A	Reactor Vessel-Cont'd							
B1.20	Head Welds	[1.1-1]						
B1.21	- Circumferential -	Weld No.'s						Relief No.002
	Bottom Head	4-443		1	Not Accessible	-	-	T = 5.3"
	Closure Head	6-446B		1	Not Accessible	-	-	T = 7.0"
B1.22	- Meridional Welds -	Weld No.'s			Not Accessible	-	-	Relief No.002
	Bottom Head	1-443A		1				T = 5.3"
		1-443B		1				
		1-443C		1				
		1-443D		1				
		1-443E		1	Exam'n area meets			
		1-443F		1	or exceeds req'ts of figure IWB2500-3			
		Weld No.'s		(6)	As Accessible			Relief No.002
	Closure Head @Stud							
	#5-6	1-446A	UT	2	38" 100%*	One	17	T = 7.0"
	#14-15	1-446B	UT		38" 100%*	One	33	
	#23-24	1-446C	UT	2	38" 100%*	Two	50	
	#33-34	1-446D	UT		38" 100%*	Two	67	*As Accessible
	#41-42	1-446E	UT	2	38" 100%*	Three	83	
	#50-51	1-446F	UT		38" 100%*	Three	100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

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			Relief #003
B1.30	Shell To Flange Weld	Weld No.	UT	(1)	As Accessible			T = 10.75"
		7-442 (From Flange)		1	182" 34% 182" 34% 182" 34%	One Two Three	33 67 100	0° Exam. From Flange Face
					Exam'n area meets Req'ts of figure IWB-2500-5			
B1-40	Head To Flange Weld	Weld No.	UT	(1)	As Accessible			Relief No.003
		6-446A		1	182" 34% 182" 34% 182" 34%	One Two Three	33 67 100	T = 7.0"
B1.50	Repair Welds							
B1.51	Beltline Region	-	-	-	- -	-	-	No Known Repair area in base metal in core region or else where

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS I

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
					Exam'n area meets Req'ts of figure IWB-2500-7				
B-D	Reactor Vessel-Cont'd	[1.1-1]			As Accessible				
B3.90	Nozzle To Vessel Welds								Relief #004 Code Case 1647 (N-73)
B3.100	And nozzle inside radius			8					
		Weld No's		(2)					
	Outlet Nozzle Loop 1	*1-29SPL	UT	1	360°	100%	One	13	From Bore
		@ 338°	UT				Three	13	From Shell
		Inner Radius	UT				Three	13	
	Outlet Nozzle Loop 2	*2-29SPL	UT	1	360°	100%	One	25	From Bore
		@ 22°	UT				Three	25	From Shell
		Inner Radius	UT				Three	25	
				(6)					
	Outlet Nozzle Loop 3	*3-29SPL	UT	1	360°	100%	One	38	From Bore
		@ 158°	UT				Three	38	From Shell
		Inner Radius	UT				Three	38	
	Outlet Nozzle Loop 4	*4-29SPL	UT	1	360°	100%	Two	50	From Bore
		@ 202°	UT				Three	50	From Shell
		Inner Radius	UT				Three	50	
	Inlet Nozzle Loop 1	*9-27.5SPL	UT	1	360°	100%	Two	63	From Bore
		@ 293°	UT				Three	63	From Shell
		Inner Radius	UT				Three	63	
	Inlet Nozzle Loop 2	*10-27.5SPL	UT	1	360°	100%	Three	75	From Bore
		@ 67°	UT				Three	75	From Shell
		Inner Radius	UT				Three	75	
	Inlet Nozzle Loop 3	*11-27.5SPL	UT	1	360°	100%	Three	88	From Bore
		@ 113°	UT				Three	88	From Shell
		Inner Radius	UT				Three	88	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
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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-D	Reactor Vessel-Cont'd	[1.1-1]						
B3.100	Inlet Nozzle Loop 4	*12-27.5SPL @ 247° Inner Radius	UT UT	1	360% 100%	Three Three Three	100 100 100	From Bore From Shell See IWB-2500-1 Footnote 5
NOTE:	Code Category B-E references pressure test. See Section 3.2 of this volume, Class 1 P.1 of 2							
B-F	Pressure Retaining Dissimilar Metal Welds							
B5.10	Nozzle Safe Ends Welds See Tab. 1.4 page 1							

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ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
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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-G-1	Reactor Vessel - Cont'd Pressure Retaining Bolting (Larger Than 2" 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(Remarks) 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	18 100% 18 18	One Two Three	33 66 100	
	Stud Holes in Flange	Threads	VT-1	54	18 18 18	One Two Three	33 66 100	
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	One Two Three	33 66 100	* Bushings Not Applicable

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: Reactor Vessel
TABLE: 1.1
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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-G-2	Reactor Vessel-Cont'd	[1.1-1]						
	Pressure Retaining Bolting (2 in. Dia. and Less)				Total of Five Conoseal Assy.			
B-7.10	Marmon Clamps (Bolts, Studs & Nuts)	Conoseal Bolts (For) In-Core Thermocouples	VT-1	15	15 bolts 100% 15 bolts 100% 15 bolts 100%	One Two Three	33 67 100	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
B-N-1	Interior of Reactor Vessel							
B13.10	Vessel Interior	Upper and Lower Internals Thermal Shield Drive Rods	VT-3	-	100% of region of surfaces made accessible by removal of components during normal refueling outages	One Two Three	100 100 100	At first scheduled refueling outage and subsequent outages at approximately three year increments.

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MAJOR ITEM: Reactor Vessel
TABLE: 1.1
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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-N-2 B-N-3	Reactor Vessel-Cont'd Removable Core Support Structures	[1.1-1]						
B13.30	Core Support Structure	- RPV - Core Barrel	VT-3	-	100% of regions of welds and surfaces made accessible by removal of core barrel and supporting structure	Three	100	Includes core support welds and attachment lugs Note B13.10
		Core Barrel	VT-3	-	Regions of core barrel welds and surfaces made accessible by core barrels removal from vessel	Three	100	Examine to extent possible

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MAJOR ITEM: Reactor Vessel
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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
	Reactor Vessel-Cont'd	[1.1-1]			Exam. area meets or exceeds req'ts fig. IWB-2500-18			
B-O	Pressure Retaining Welds in Control Rod Housings							
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							

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MAJOR ITEM: Pressurizer
TABLE: 1.2
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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-B B2.10	Pressure Retaining Welds in Vessels other than Reactor Pressurizer Vessel Shell to Head Welds	Serial No. W 1051 DWG. Ref. DC663208-8-1			Exam'n area meets or exceeds req'ts of Figure IWB-2500-1 and Figure IWB-2500-2			[*] ISI DWG Page No.'s of Figure
B2.11	- Circumferential -	* [1.2-1]		(2)	(Length)			T = 4.2" L = 291"
	Bottom Head to Lower Course	Weld No. Girth 1	UT	1	97" 100% 97" 97"	One Two Three	33 66 100	Note remarks for B2.12
	Upper Course to Top Head	Weld No. Girth 5	UT	1 (2)	97" 100% 97" 97"	One Two Three	33 66 100	T = 4.2" L = 291"
B2.12	-Longitudinal- [Bottom Head] Lower Course	Weld No. Long'l 6	UT	1	12" 7%	One	07	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%	Two	09	

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: Pressurizer
TABLE: 1.2
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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-B	Pressurizer Vessel-Cont'd	[1.2-1] -Remarks-	-	-	- -	-	-	B2.20 items are not applicable upper and lower heads are cast carbon steel
B2.20	Head Welds							
B2.21	-Circumferential (and)							
B2.22	-Meridional							
B-D	Full Penetration Welds of Nozzles in Vessels	-	-	-	Category B-D, Full Penetration Welds of Nozzles in Vessels does not apply to Diablo Canyon Pressurizer. Code Fig. IWB-2500-7 does not apply. Nozzles are integrally cast.			B-D Items not applicable: nozzles integrally cast
B3.110	Nozzle to Vessel Welds							
B3.120	Nozzle Inside Radius							
NOTE:	Code Category B-E references pressure test. See Section 3.2 of this volume, Class 1 P.1 of 2							
B-F	Pressure Retaining Dissimilar Metal Welds							
B5.20	Nozzle to Safe-end Welds							
	See Tab. 1.4 Page 2							

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MAJOR ITEM: Pressurizer
TABLE: 1.2
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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
	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 B7.20	Pressure Retaining Bolting (2 in. dia. and less)	[1.2-1]			Bolts			
	Upper Head	Manway Bolting	(VT-1)	16	5 - 100% 5 6	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 (Support) attachments	[1.2-1] Weld No.			Exam area meets or exceeds req'ts of Fig. IWB-2500-14			
	Support Skirt	Girth 10	(UT)	1	97" 100% 97" 97"	One Two Three	33 66 100	T = 1.5" L = 291"

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MAJOR ITEM: Steam Generators
TABLE: 1.3
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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-B	Pressure Retaining Welds in Vessels other than Reactor Steam Generators (Primary Side)- - Remarks-	DWG. REF. DC-663206-26-1						See section 2.0 for secondary side
B2.30	Head Welds	* [1.3-1]						[*] ISI DWG. Page No.'s
B2.31 B2.32	Circumferential and Meridional Welds	-	-	-	- - Exam'n area meets or exceeds req'ts of figure IWB-2500-6(B)	-	-	B2.31 & B2.32 Items not applicable, channel heads are cast cabon steel
B2.40	Tubesheet to Head Welds	Weld No.		(4)	Length			
	Steam Generator 1-1 (Serial No. 1041)	Channel Hd 1-1	UT	1	12' 100% 12' 12'	One Two Three	33 66 100	T = 5.16" L = 36'
	Steam Generator 1-2 (Serial No. 1042)	Channel Hd 1-2	UT	1	12' 100% 12' 12'	One Two Three	33 66 100	
	Steam Generator 1-3 (Serial No. 1043)	Channel Hd 1-3	UT	1	12' 100% 12' 12'	One Two Three	33 66 100	
	Steam Generator 1-4 (Serial No. 1044)	Channel Hd 1-4	UT	1	12' 100% 12' 12'	One Two Three	33 66 100	

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MAJOR ITEM: Steam Generators
TABLE: 1.3
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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-D	Full Penetration Welds of Nozzles in Vessels Steam Generators-Cont'd	[1.3-1]						
B3.130 B3.140	Nozzle to Vessel Welds and Nozzle inside Radius Section	-	-	-	Category B-D, Full Penetration Welds of Nozzles in Vessels does not apply to Diablo Canyon Steam Generators. Code Fig. IWB-2500-7 does not apply. Nozzles are integrally cast.	-	-	Nozzles are integrally cast to channel.head
NOTE: Code Category B-E Not Applicable to Stm. Gen.'s								
	Steam Generators-Cont'd	[1.3-1]						
B-F	Pressure Retaining Dissimiliar Metal Welds							
B5.30	Nozzle to Safe-end Welds (Channel Head) See Table 1.4 page 3							

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Steam Generators
TABLE: 1.3
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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
	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)	Channel Hd Manway Bolting		128 (32)	(Each Manway)			
B7.30	Bolts, Studs and Nuts							
	Steam Generator 1-1	No.1(to)No.16	VT-1	16	16 100%	One	12	Inlet
			VT-1	16 (32)	16	One	25	Outlet
	Steam Generator 1-2	No.1(to)No.16	VT-1	16	16 100%	Two	37	Inlet
			VT-1	16 (32)	16	Two	50	Outlet
	Steam Generator 1-3	No.1(to)No.16	VT-1	16	16 100%	Three	62	Inlet
			VT-1	16 (32)	16	Three	75	Outlet
	Steam Generator 1-4	No.1(to)No.16	VT-1	16	16 100%	Three	87	Inlet
			VT-1	16	16	Three	100	Outlet
B-H	Vessel Supports	-	-	-	- -	-	-	B8.30 Item not applicable. Vessel is supported by integrally cast pads
B8.30	Integrally Welded Attachments							

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MAJOR ITEM: Steam Generators
TABLE: 1.3
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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
	Steam Generator's Cont'd							
B-Q	Steam Generator Tubing							
B16.10	Straight Tube Design	-	-	-	- -	-	-	B16.10 Item Not Applicable
B16.20	U-Tube Design	Tube Map		Tubes*				
	(Steam Generator)	Gen 1-1	ET	3,388	102 (*) 3%	-	-	*Reference Technical Specification for Inspection Requirements
		Gen 1-2	ET	3,388	102 (*) 3%	-	-	
		Gen 1-3	ET	3,388	102 (*) 3%	-	-	
		Gen 1-4	ET	3,388	102 (*) 3%	-	-	
					*10CFR50 Requires Program to be Based on the Plants Approved Technical Specification 3/4.4.5 Ref: 10CFR50.55a(b)(2)(iii)			
	End Of Table 1.3							

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MAJOR ITEM: Piping Welds
TABLE: 1.4
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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 only require volumetric examination if they are four inch nominal pipe size or greater. This condition was corrected in the Winder 1980 Addenda (referenced in 10CFR50.55a) to require volumetric examination of those branch connections greater than or equal to four inch diameter. As a result, branch connections four inches and greater nominal diameter are scheduled for volumetric and surface examination, while those less than four inch diameter are scheduled for surface examination only.

Occasional portions of certain pipe welds are inaccessible for examination. See request for relief # NDE-008. Any inaccessible portions will be fully documented and the remaining weld are examined to the fullest extent possible.

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

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MAJOR ITEM: Piping (S.E.) Welds
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-F	Pressure Retaining Dissimiliar Metal Welds	Reactor Vessel Piping "Pup" is 316 stainless welded directly to RPV clad buttering. "Pup" to pipe is not considered a bi-metal weld joint Note B9.10 for system schedule continuation			Volumetric exam scheduled coincident with vessel nozzle exam. per Section XI				Welds are the same as cat'y B-F, B5.10
B5.50	Piping-Safe End Welds				See Appendix A for piping schedule/cal. std. Exam area meets or exceeds reqt's of Fig. IWB-2500-8				
	Reactor Vessel								[ ] ISI DWG. Page No.'s
		Weld No.'s & Line No.'s		(8)	(Length)				( ) Construction Dwg.Page No..'s
	Outlet Nozzle Loop 1 (7-30) [1.4-1]	WIB-RC-1-1SE *1-29SPL	PT UT	1	360°	100%	One One		
	Outlet Nozzle Loop 2 (7-31) [1.4-2]	WIB-RC-2-1SE *2-29SPL	PT UT	1	360°	100%	One One	25 (Vol)	Two nozzles (safe-ends) will be volu-metrically examined the first inspec-tion period. Remaining volu-metric exams may be deferred until the end of the inspec-tion interval. (Category B-F, Footnote 2)
	Outlet Nozzle Loop 3 (7-31A) [1.4-3]	WIB-RC-3-1SE *3-29SPL	PT UT	1	360°	100%	One Three	38 (Sur)	
	Outlet Nozzle Loop 4 (7-30) [1.4-4]	WIB-RC-4-1SE *4-29SPL	PT UT	1	360°	100%	Two Three		
	Inlet Nozzle Loop 1 (7-30 [1.4-1]	WIB-RC-1-18SE *9-27.5SPL	PT UT	1	360°	100%	Two Three	63 (Sur)	
	Inlet Nozzle Loop 2 (7-31) [1.4-2]	WIB-RC-2-20SE *10-27.5SPL	PT UT	1	360°	100%	Three Three		
	Inlet Nozzle Loop 3 (7-31A) [1.4-3]	WIB-RC-3-18SE *11-27.5SPL	PT UT	1	360°	100%	Three Three		

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MAJOR ITEM: Piping (S.E.) Welds
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-F	Pressure Retaining Dissimiliar Metal Welds (Cont'd)	Weld No.'s Line No.'s						
B5.50	Inlet Nozzle Loop 4 (7-30A) [1.4-4]	WIB-RC-4-18SE *12-27.5SPL	PT UT	1	360° 100%	Three Three	100 (Sur, Vol)	

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MAJOR ITEM: Piping (S.E.) Welds
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-F	Piping-Safe Ends, Cont'd	Nozzle end reducer sections are 316 SS welded directly to nozzle. Reducer to pipe is not considered a Bi-metal weld joint			Exam area meets or exceeds req'ts of fig. IWB-2500-8				Welds are the same as cat'y B-F, B5.20 Tab. 1.2
B5.20	Pressurizer	Note B9.10 for system schedule continuation							
		Weld No.'s & Line No.'s		(6)	(Linear)				(Pzr = Pressurizer)
B5.50	Pzr RV-8010A, Inlet (7-27) [1.4-21]	WIB-313SE S6-729-6SPI	PT UT	1	21"	360°	One	17	(Upper Head)
	Pzr RV-8010B, Inlet (7-28) [1.4-22]	WIB-322SE S6-728-6SPL	PT UT	1	21"	360°	One	33	
	Pzr RV-8010C, Inlet (7-29) [1.4-23]	WIB-331SE S6-727-6SPL	PT UT	1	21"	360°	Two	50	
	Pzr Power RV, Inlet (7-25) [1.4-24]	WIB-340-SE S6-730-6SPL	PT UT	1	21"	360°	Two	66	
	Pzr Spray Line (7-9) [1.4-29]	WIB-374SE S6-15-4SPL	PT UT	1	14"	360°	Three	83	
	Pzr Surge Line (8-59A) [1.4-5]	WIB-71SE *16-14SPL	PT UT	1	44"	360°	Three	100	(Lower Head)

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MAJOR ITEM: Piping (S.E.) Welds
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-F	Piping - Safe Ends, cont'd Steam Generator	NOTE: Stainless steel piping is welded directly to Nozzle Note B9.10 for system schedule continuation Welds No.'s & Line No.'s		(8)	Exam area meets or exceeds req'ts of fig. IWB-2500-8 (Linear)				Welds are the same as Cat'y B-F, B5.30 Tab 1.3 Channel Head
B5.30	Steam Generator 1-1 Reactor Coolant Out (7-30) [1.4-1]	WIB-RC-1-5SE *1-29SPL	PT UT	1	92"	360°	One	13	Inlet
	Reactor Coolant Pp Suct Loop 1 (7-30) [1.4-1]	WIB-RC-1-6SE *5-31SPL	PT UT	1	98"	360°	One	25	Outlet
	Steam Generator 1-2 Reactor Coolant Out Loop 2 (*7-31)[1.4-2]	WIB-RC-2-6SE *2-29SPL	PT UT	1	92"	360°	Two	38	Inlet
	Reactor Coolant Pp Suct Loop 2 (7-31) [1.4-2]	WIB-RC-2-7SE *6-31SPL	PT UT	1	98"	360°	Two	50	Outlet
	Steam Generator 1-3 Reactor Coolant Out Loop 3 (7-31A)[1.4-3]	WIB-RC-3-5SE *3-29SPL	PT UT	1	92"	360°	Three	63	Inlet
	Reactor Coolant Pp Suct Loop 3 (7-31A) [1.4-3]	WIB-RC-3-6SE 7-31SPL	PT UT	1	98"	360°	Three	75	Outlet
	Steam Generator 1-4 Reactor Coolant Out Loop 4 (7-30A)[1.4-4]	WIB-RC-4-5SE *4-29SPL	PT UT	1	92"	360°	Three	88	Inlet

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MAJOR ITEM: Piping (S.E.) Welds
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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-F B5.30	Piping-Safe ends, Cont'd Steam Generators	Weld No. & Line No.						
B5.50	Reactor Coolant Pp Suct Loop 4(7-30A) [1.4-4]	WIB-RC-4-6SE *8-31SPL	PT UT	1	98" 360°	Three	100	Outlet

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MAJOR ITEM: Piping Bolting (B-G)
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-6	Piping - cont'd							
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. & Less)	Line No. & Flange No.			Flange Bolting Percentage by System Amount			
B7.50	Bolts, Studs and Nuts 3 Inch Diameter Pipe							
	Loop 1 Hot Leg RTD Conn (7-23) [1.4-30]	S6-1141-3SPL 1-FE-499A	VT-1	8 16	8 Studs 100% 16 Nuts	One	25	FE=Flow Element
	Loop 2 Hot Leg RTD Conn (7-24) [1.4-31]	26-1147-3SPL 1-FE-499B	VT-1	8 16	8 Studs 100% 16 Nuts	Two	50	
	Loop 3 Hot Leg RTD Conn (7-21) [1.4-32]	S6-1153-3SPL 1-FE-499C	VT-1	8 16	8 Studs 100% 16 Nuts	Three	75	
	Loop 4 Hot Leg RTD conn (7-22) [1.4-33]	S6-1158-3SPL 1-FE-499D	VT-1	8 16	8 Studs 100% 16 Nuts	Three	100	

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MAJOR ITEM: Piping Bolting (B-G)
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-G-2 B7.50	Piping-Cont'd Bolting-Cont'd							Flange Between Welds Number
	2 Inch Diameter Pipe	Line No. & Flange No.						
	Loop 1 Cold Leg RTD Conn (7-220) [1.4-60]	S6-1140-2SPL -	VT-1	8 16	8 Studs 100% 16 Nuts	One	25	WIB-37/WIB-38
	Loop 2 Cold Leg RTD Conn (7-222) [1.4-61]	S6-1146-2SPL -	VT-1	8 16	8 Studs 100% 16 Nuts	Two	50	WIB-155/WIB-156
	Loop 3 Cold Leg RTD Conn (7-236) [1.4-62]	S7-1152-2SPL -	VT-1	8 16	8 Studs 100% 16 Nuts	Three	75	WIB-270/WIB-271
	Loop 4 Cold Leg RTD Conn (7-234) [1.4-63]	S6-1159-2SPL -	VT-1	8 16	8 Studs 100% 16 Nuts	Three	100	WIB-362/WIB-363
	1.5 Inch Diameter Pipe	After 2x1.5 Red						
	Reac Cool Pp 1 Seal Wtr In(8-736) [1.4-42]	S6-54-1.5 -	VT-1	4 8	4 Studs 100% 8 Nuts	One	25	WIB-1021/WIB-1022
	Reac Cool Pp 2 Seal Wtr In (8-713) [1.4-43]	S6-55-1.5 -	VT-1	4 8	4 Studs 100% 8 Nuts	Two	50	WIB-980/WIB-981
	Reac Cool Pp 3 Seal Wtr In (8-376) [1.4-44]	S6-56-1.5 -	VT-1	4 8	4 Studs 100% 8 Nuts	Three	75	WIB-991/WIB-992
	Reac Cool Pp 4 Seal Wtr In (8-741) [1.4-45]	S6-57-1.5 -	VT-1	4 8	4 Studs 100% 8 Nuts	Three	100	WIB-1004/WIB-1005

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MAJOR ITEM: Piping Bolting (B-G)
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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-G-2 B7.50	Piping-Cont'd Bolting-Cont'd 1.5 Inch Diameter Pipe	Line No. & Flange No.						
	Boron Inj Tk Out Loop 1 C.L.(9-212) [1.4-64]	S6-1991-1.5 1-FE-924	VT-1	4 8	4 Studs 100% 8 Nuts	One	25	
	Boron Inj Tk Out Loop 2 C.L.(9-210) [1.4-67]	S6-1992-1.5 1-FE-925	VT-1	4 8	4 Studs 100% 8 Nuts	Two	50	
	Boron Inj Tk Out Loop 3 C.L.(9-209) [1.4-70]	S6-1993-1.5 1-FE-926	VT-1	4 8	4 Studs 100% 8 Nuts	Three	75	
	Boron Inj Tk Out Loop 4 C.L.(9-212) [1.4-64]	S6-1994-1.5 1-FE-927	VT-1	4 8	4 Studs 100% 8 Nuts	Three	100	

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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	Pressure Retaining Welds in Piping							
B9.10	Nominal Pipe size 4 in. and Greater B-J Items are identified by System Under Applicable Code Item*				Exam'n area meets or exceeds req'ts of figure IWB-2500-8			*Schedule in accordance with page (i) discussion, this tab section
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

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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 B9.10	Piping-Cont'd Nominal Pipe Size 4 In. & Greater				Exam are meets or excess req'ts of Figure IWB-2500-8			Scheduled in Accordance with Page (i) Discussion this tab section
B9.11 B9.12	Circumferential Welds 31 Inch Nom. Diameter (Including Intersecting Longitudinal Welds)	Line No. & ISI DWG No.		(20)	(6) Sch'd			( ) Construction Dwg. No. T=2.495
	Reactor Coolant Pp Suct Loop 1 (7-30)	*5-31SPL [1.4-1]	PT UT	5	1 Weld 360°	One	4	WIB-RC-1-12 and one foot of upper and lower seam WIB-RC-2-14 and one foot of upper and lower seams
	Reactor Coolant Pp Suct Loop 2 (7-31)	*6-31SPL [1.4-2]	PT UT	5	1 Weld 360° 2 Welds 360°	One Two	8 17	WIB-RC-2-9 and one foot of upper and lower seams WIB-RC-2-10 and one foot of upper and lower seams
		One foot of each longitudinal weld will be done at the intersection with the circumferential weld.						

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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 B9.11 B9.12	Piping-Cont'd Circ. and Long'l Welds 31 In. Nom. Dia. Cont'd	Line No. & ISI DWG No.						
	Reactor Coolant Pp Suct Loop 3 (7-31A)	*7-31SPL [1.4-3]	PT UT	5	1 Weld 360°	Three	21	WIB-RC-3-12 and one foot of upper & lower seams
	Reactor Coolant Pp Suct Loop 4 (7-30A)	*8-31SPL [1.4-4]	PT UT	5	1 Weld 360°	Three	25	WIB-RC-4-12 and one foot of upper & lower seams
B9.11	Circumferential welds 29 Inch Nom. Diameter	Line No. & ISI Dwg. No.		(12)	(1) Sch'd†			†29" dia. welds are not consi- dered to be highest stress loaded
	Reactor Coolant Out Loop 1 (7-30)	*1-29 SPL [1.4-1]	-	-	-			
	Reactor Coolant Out Loop 2 (7-31)	*2-29 SPL [1.4-2]	PT UT	3	1 Weld	Two	17	WIB-RC-2-5
	Reactor Coolant Out Loop 3 (7-31A)	*3-29 SPL [1.4-3]	-	-	-			T=2.335

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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 B9.10	Piping-Circ'l Cont'd (4 In. & greater)							
B9.11	Circumferential Welds 29 Inch Nom. Diameter	Line No. & ISI DWG. No.		(12)	(1) Sch'd†			
	Reactor Coolant Out Loop 4 (7-30A)	*4-29 SPL [1.4-4]						†29 inch dia. welds are not considered to be highest stress loaded. RC Pipe Composite 25 percent.
B9.11	Circumferential Welds 27.5 inch Nom. Diameter			(16)	(5) Sch'd			T=2.215
	Reactor Coolant Pump Disch Loop 1 (7-30)	*9-27.5SPL [1.4-1]	PT UT	4	1 Weld 360°	One	6	WIB-RC-1-13
	Reactor Coolant Pump Disch Loop 2 (7-31)	*10-27.5SPL [1.4-2]	PT UT	4	2 Welds 360°	Two	13	WIB-RC-2-15 WIB-RC-2-20
	Reactor Coolant Pump Disch Loop 3 (7-31A)	*11-27.5SPL [1.4-3]	PT UT	4	1 Weld 360°	Three	18	WIB-RC-3-13
	Reactor Coolant Pump Disch Loop 4 (7-30A)	*12-27.5SPL [1.4-4]	PT UT	4	1 Weld 360°	Three	25	WIB-RC-4-13

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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 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						% TO DATE for each pipe system
B9.11	Circumferential Welds 14 Inch Nom. Diameter	Line No. & ISI DWG No.		(26)	(7) Sch'd			14 In. Composite Percent (27)
	Pressurizer Surge Line (8-59A)	*16-14SPL [1.4-5]	PT UT	8	1 Weld 360° 1 Weld	One Two	13 25	
	Hot Leg Recirc Before V-8702 (7-4)	S6-109-14SPL [1.4-6]	PT UT	11	1 Weld 360° 2 Welds	One Two	9 27	
	Loop 4 Hot Leg Before V-8701 (10-11)	S6-1665-14SPL [1.4-7]	PT UT	7	2 Welds 360°	Three	28	
B9.11	Circumferential Welds 10 Inch Nom. Diameter			(34)	9 Sch'd			10 In. Composite Percent (27)
	Accumulator Injection Loop 1 (9-16,17)	S6-253-10SPL [1.4-8]	PT UT	9	1 Weld 360° 1 Weld	One Two	11 22	
	Accumulator Injection Loop 2 (9-21)	S6-254-10SPL [1.4-9]	PT UT	9	1 Weld 360° 1 Weld	One Two	11 22	

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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-Circ'l. Cont'd	Line No. &						
B9.10	(4 In.& Greater)	ISI DWG No.						
B9.11	Accumulator Injection	S6-255-10SPL	PT	6	1 Weld 360°	One	17	
	Loop 3 (9-19)	[1.4-10]	UT		1 Weld	Two	33	
	Accumulator Injection	S6-256-10SPL	PT	10	1 Weld 360°	One	10	
	Loop 4 (9-18)	[1.4-11]	UT		1 Weld	Two	20	
					1 Weld	Three	30	

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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	Piping - Circ'l Cont'd (4 In. & Greater)							
B9.11	Circumferential Welds 8 Inch Nom. Diameter	Line No. & ISI DWG No.		(11)	(3) Sch'd			8 In. Composite Percent (27)
	SIS to RCS Loop 1 Hot Leg (10-16)	S6-2575-8 [1.4-12]	PT UT	5	1 Weld 360°	One	20	
	SIS to RCS Loop 2 Hot Leg (10-16)	S6-2576-8 [1.4-12]	PT UT	6	- 1 Weld 360° 1 Weld	- Two Three	- 17 33	
B9.11	Circumferential Welds 6 Inch Nom. Diameter			(121)	(31) Sch'd			6 In. Composite Percent (26)
	Safety Inj. Loop 1 Hot Leg (10-17)	S6-235-6SPL+ [1.4-13]	PT UT	14	1 Weld 360° 1 Weld 1 Weld	One Two Three	7 14 21	SI(to)*1-29SPL
	Safety Inj Loop 2 Hot Leg (10-18)	S6-236-6SPL+ [1.4-14]	PT UT	11	1 Weld 360° 1 Weld 1 Weld	One Two Three	9 18 27	SI(to)*2-29SPL
	Safety Inj Loop 3 Hot Leg (9-33)	S-237-6 SPL+ [1.4-15]	PT UT	10	1 Weld 360° 1 Weld	One Two	10 20	SI(to)*3-29SPL
	Safety Inj Loop 4 Hot Leg (7-4) (9-34)	S6-238-6SPL [1.4-6,1.4-16]	PT UT	8	1 Weld 360° - 1 Weld	One - Three	13 - 25	SI(to) RHR S6-109-14SPL

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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 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 1-1 Inj Cold Leg 1 (9-16,17) (9-36,226)	S6-3844-6SPL [1.4-17]	PT UT	8	- 1 Weld 360° 1 Weld	- Two Three	- 13 25	
	RHR Pp 1-1 Inj Cold Leg 2(9-37,208)	S6-3845-6SPL [1.4-18]	PT UT	12	1 Weld 360° 1 Weld 1 Weld	One Two Three	8 17 25	
	RHR Pp 1-2 Inj Cold Leg 3 (9-43)	S6-3846-6SPL [1.4-19]	PT UT	8	1 Weld 360° 1 Weld -	One Two -	13 25 -	
	RHR Pp 1-2 Inj Cold Leg 4 (9-42)	S6-3847-6SPL [1.4-20]	PT UT	11	1 Weld 360° 1 Weld 1 Weld	One Two Three	9 18 27	
	Pressurizer Inlet RV-8010A (7-27)	S6-729-6SPL+ [1.4-21]	PT UT	9	1 Weld 360° 1 Weld 1 Weld	One Two Three	11 22 33	
	Pressurizer Inlet RV-8010B (7-28)	S6-728-6SPL+ [1.4-22]	PT UT	9	1 Weld 360° 1 Weld 1 Weld	One Two Three	11 22 33	
	Pressurizer Inlet RV-8010C (7-29)	S6-727-6SPL [1.4-23]	PT UT	9	1 Weld 360° 1 Weld	One Two	11 22	

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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 B9.10	Piping-Circ'l cont'd (4 In. & Greater) 6 in. Nom. Dia. Cont'd	Line No. & ISI DWG No.							
	Pressurizer Power R.V. (7-25)	S6-730-6SPL [1.4-24]	PT UT	12	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 17 25	
B9.11	Circumferential Welds 4 Inch Nom. Diameter			(86)	(22) Sch'd				4 In. Composite Percent (26)
	Pressurizer RV PCV-455C (Inlet)(7-25)	S6-4081-4SPL [1.4-24]	PT UT	4	1 Weld - -	360°	One - -	25 - -	
	Loop 1 Spray Line (7-6,7,8)	S6-13-4SPL [1.4-25] [1.4-26] [1.4-27]	PT UT	28	2 Welds 2 Welds 3 Welds	360°	One Two Three	7 14 25	Spray to PZR via S6-15-4 From *9-27.5 Loop 1
	Loop 2 Spray Line (7-5,6)	S6-14-4SPL [1.4-25] [1.4-28]	PT UT	26	2 Welds 2 Welds 3 Welds	360°	One Two Three	8 15 27	Spray to PZR Via-S6-15-4 From *10-27.5 Loop 2
	Pressurizer Spray Line (7-9)	S6-15-4SPL [1.4-29]	PT UT	28	2 Welds 2 Welds 3 Welds	360°	One Two Three	7 14 25	Spray to PZR From S6-13-4 And S6-14-4

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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 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.		(155)	(39) Sch'd			3 In. Composite Percent (25)
	Loop 1 Hot Leg RTD Conn (7-23)	S6-3488-3SPL [1.4-30]	PT	6	1 Weld 360° 1 Weld	Two Three	17 33	@V-8073A To Junction S6-1141-3SPL
	Loop 1 Cold Leg RTD Conn (7-23)	S6-3798-3SPL [1.4-30]	PT	2 -	- -	- -	- -	@V-8075A To Junction S6-1141-3SPL
	Loop 1 RTD Manifold Ret Hdr (7-23)	S6-1141-3SPL [1.4-30]	PT	11	1 Weld 360° 1 Weld 1 Weld	One Two Three	9 18 27	To Crossover From Junction 3488-3/3798-3
	Loop 2 Hot Leg RTD Conn (7-24)	S6-3489-3SPL [1.4-31]	PT	8	1 Weld 360° 1 Weld	Two Three	13 25	@V-8073B To Junction S6-1147-3SPL
	Loop 2 Cold Leg RTD Conn (7-24)	S6-3799-3SPL [1.4-31]	PT	2	- -	-	-	@V-8075B To Junction S6-1147-3SPL
	Loop 2 RTD Manifold Ret Hdr (7-24)	S6-1147-3SPL [1.4-31]	PT	11	1 Weld 360° 1 Weld 1 Weld	One Two Three	9 18 27	To Crossover From Junction 3489-3/3799-3

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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 Diameter) 3 Inch Nom. Diameter-Cont'd	Line No. & ISI DWG. No.							
	Loop 3 Hot Leg RTD Conn (7-21)	S6-3495-3SPL [1.4-32]	PT	11	1 Weld 1 Weld 1 Weld	360°	One Two Three	9 18 27	@V-8073C To Junction S6-1153-3SPL
	Loop 3 Cold Leg RTD Conn (7-21)	S6-3800-3SPL [1.4-32]	PT	5	1 Weld	360°	One	20	@V-8075C To Junction S6-1153-3SPL
	Loop 3 RTD Manifold Ret Hdr (7-21)	S6-1153-3SPL [1.4-32]	PT	8	1 Weld 1 Weld	360°	Two Three	13 25	To Crossover From Junction 3495-3/3800-3
	Loop 4 Hot Leg RTD Conn (7-22)	S6-3496-3SPL [1.4-33]	PT	6	1 Weld 1 Weld	360°	One Two	17 33	@V-8073D To Junction S6-1158-3SPL
	Loop 4 Cold Leg RTD Conn (8-22)	S6-3801-3SPL [1.4-33]	PT	2	- 1 Weld	- 360°	- Two	- 50	@V-8075D To Junction, S6-1158-3SPL
	Loop 4 RTD Manifold Ret Hdr (7-22)	S6-1158-3SPL [1.4-33]	PT	10	1 Weld 1 Weld	360°	One Two	10 20	To Crossover From Junction 3496-3/3801-3
	Charging Line Loop 4 (8-61)	S6-246-3SPL [1.4-34]	PT	8	1 Weld - 1 Weld	360° -	One - Three	13 13 25	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	Piping-Circ'l Cont'd (Less Than 4 Inch Dia.)								
B9.21	3 Inch Nom. Diameter-Cont'd	Line No. & ISI DWG. No.							
	Charging Line Loop 3 (8-59)	S6-50-3SPL [1.4-35]	PT	7	- 1 Weld 1 Weld	- 360°	- Two Three	- 14 29	CVCS Alternate Charging
	Boron Inj Cold Leg Hdr (9-35)	S6-1016-3SPL S6-1995-3SPL [1.4-36]	PT PT	4 9	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 15 23	
	Letdown Line Loop 2 (7-14,15)	S6-24-3SPL [1.4-37] [1.4-38]	PT	16	1 Weld 1 Weld 2 Welds	360°	One Two Three	6 13 25	See p. 29 for Socket welds @ LCV-459
	Pressurizer Pwr RV PCV474 (7-25)	S6-1171-3SPL [1.4-24]	PT	9	2 Welds	360°	One	22	*Combined PZR Pwr RV Lines.
	Pressurizer Pwr RV PCV455C (7-25)	S6-1172-3SPL [1.4-24]	PT	9	2 Welds	360°	Two	22	
	Pressurizer Pwr RV PCV456 (7-26)	S6-1195-3SPL [1.4-39]	PT	11	3 Welds	360°	Three	27	

See item B9.40, socket weld section page no. 1.4-29-33 for small bore circumferential welds (1.5 in dia.)

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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	Pressure Retaining Welds In Piping (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

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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 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 (1)				(1) Reference: WNES SPEC G676343
B9.30	Nominal Pipe Size Greater Than 2 In.	Line No. & Branch Weld†							
B9.31	14 Inch Nom. Diameter			(2)†	(1) Sch'd†		†	†	†Choice of listed welds will be made to equal scheduled percentage for each size throughout 14 in. Composite percent (50)
	Pressurizer Surge Line (7-31) [1.4-2] ([1.4-5]	*16-14SPL WIB-RC-2-3	PT UT	1	1 Branch	360°	Two	50	
	Hot Leg Recirc Before V-8702 (7-31)[1.4-4] [1.4-6]	S6-109-14SPL WIB-RC-4-3	PT UT	1	-	-	-	-	
B9.31	10 Inch Nom. Diameter			(4)	(1) Sch'd				10 In. Composite Percent (25)
	Accumulator Injection Loop 1 (9-16,17) [1.4-1] [1.4-8]	S6-253-10SPL WIB-RC-1-14	PT UT	1	1	360°	One	25	
	Accumulator Injection Loop 2 (9-21) [1.4-2] [1.4-9]	S6-254-10SPL WIB-RC-2-16	PT UT	1	-	-	-	25	
	Accumulator Injection Loop 3 (9-19) [1.4-3] [1.4-10]	S6-255-10SPL WIB-RC-3-14	PT UT	1	-	-	-	25	
	Accumulator Injection Loop 4 (9-18) [1.4-4] [1.4-11]	S6-256-10SPL WIB-RC-4-14	PT UT	1	-	-	-	25	

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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 B9.30	Piping-Cont'd (Branch Welds Greater Than 2 Inch Diameter)							
B9.31	6 Inch Nom. Diameter	Line No. & Branch Weld		(3)	(1) Sch'd			6 In. Composite Percent (33)
	Safety Inj. Loop 1 Hot Leg (10-17) [1.4-1] [1.4-13]	S6-235-6SPL WIB-RC-1-3	PT UT	1	- -	-	-	
	Safety Inj Loop 2 Hot Leg (10-18) [1.4-2] [1.4-14]	S6-236-6SPL WIB-RC-2-4	PT UT	1	1 Branch 360°	Two	33	
	Safety Inj. Loop 3 Hot Leg (9-33) [1.4-3] [1.4-15]	S6-237-6SPL WIB-RC-3-3	PT UT	1	- -	-	33	Note: Loop 4 Inj to RHR 14X14X6" Tee
B9.31	4 Inch Nom. Diameter			(2)	(1) Sch'd			4 In. Composite Percent (50)
	Loop 1 Spray Line (7-6,7,8) [1.4-1] [1.4-27]	S6-13-4SPL WIB-RC-1-15	PT UT	1	1 Branch 360°	One	50	
	Loop 2 Spray Line (7-5,6) [1.4-2][1.4-28]	S6-14-4SPL WIB-RC-2-18	PT UT	1	- -	-	50	

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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 B9.30	Piping-cont'd (Branch Welds Greater than 2 Inch Diameter)								
B9.31	3 Inch Nom. Diameter*	Line No. & Branch Weld		(7)	(2) Sch'd				3 In. Composite Percent (29)
	Loop 1 RTD Manifold Ret Hdr (7-30) [1.4-30] [1.4-1]	S6-1141-3SPL WIB-RC-1-10	PT	1	-	-	-	-	*See page i discussion, this tab section for explanation of examination requirements.
	Loop 2 RTD Manifold Ret Hdr (7-30) [1.4-2] [1.4-31]	S6-1147-3SPL WIB-RC-2-11	PT	1	1 Branch	360°	Two	14	
	Loop 3 RTD Manifold Ret Hdr (7-31A) [1.4-3] [1.4-32]	S6-1153-3SPL WIB-RC-3-10	PT	1	-	-	-	-	
	Loop 4 RTD Manifold Ret Hdr (7-30A) [1.4-4] [1.4-33]	S6-1158-3SPL WIB-RC-4-10	PT	1	-	-	-	-	
	Charging Line Loop 4 (7-30A) [1.4-4][1.4-34]	S6-246-3SPL WIB-RC-4-15	PT	1	-	-	-	-	
	Charging Line Loop 3 (7-31A) [1.4-3][1.4-35]	S6-50-3SPL WIB-RC-3-15	PT	1	-	-	-	-	
	Letdown Line Loop 2 (7-31) [1.4-2][1.4-37]	S6-24-3SPL WIB-RC-2-12	PT	1	1 Branch	360°	Three	29	

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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 B9.30	Piping-Cont's Branch Weld 2 Inch & less (Diameter)				Code figure IWB2500-10 is essentially the weld (branch) design for all systems identified under this code category sub-item (1)			(1) Reference: WNES SPEC G676343 2 In. Composite Percent:30
B9.32	2 Inch Nom. Diameter	Line No. & Branch Weld		(13)	(4) Sch'd			
	Loop 1 Cold Leg Drain RCDT (7-30) [1.4-1] [1.4-46]	S6-958-2SPL+ WIB-20A	PT	1	1 Branch 360°	One	8	
	Loop 3 Cold Leg Drain RCDT (7-31A) [1.4-3] [1.4-49]	S6-960-2SPL+ WIB-249A	PT	1	1 Branch 360°	Two	15	
	Loop 4 Cold Leg Drain RCDT (7-30A) [1.4-4] [1.4-49]	S6-961-2SPL+ WIB-338A	PT	1	1 Branch 360°	Three	23	Note: Loop 2 Drain is from letdown line, not cold leg.
	SI Pp1-1 Inj Hot Leg Loop 1 (9-278) [1.4-12] [1.4-50]	S6-3863-2 WIB-417A	PT	1	- -	-	-	
	SI Pp-1 Inj Hot Leg Loop 2 (9-279) [1.4-12] [1.4-51]	S6-3864-2 WIB-422A	PT	1	1 Branch 360°	Two	30	
	Loop 1 Cold Leg RTD Conn (7-30) [1.4-1] [1.4-60]	S6-1140-2SPL WIB-26A	PT	1	- -	-	-	
	Loop 2 Cold Leg RTD Conn (7-31) [1.4-2] [1.4-61]	S6-1146-2SPL WIB-144A	PT	1	- -	-	-	

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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 B9.30 B9.32	Piping-Cont'd Branch Weld 2 Inch & Less (Diameter) 2 Inch Nom. Dia. (Cont'd)	Line No. & Branch Weld						
	Loop 3 Cold Leg RTD Conn (7-31A) [1.4-3] [1.4-62]	S6-1152-2SPL WIB-255A	PT	1	- -	-	-	
	Loop 4 Cold Leg RTD Conn (7-30A) [1.4-4] [1.4-63]	S6-1159-2SPL WIB-349A	PT	1	- -	-	-	

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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 B9.30	Piping - Cont'd Branch Welds 2 Inch & less (Diameter)							
B9.32	2 In. Nom. Diameter Cont'd)	Line No. & Branch Weld						
	SI Pps Cold Leg Loop 1 Recirc (9-36,226) [1.4-17]	S6-3855-2SPL WIB-444A	PT	1	- -	-	-	
	SI Pps Cold Leg Loop 2 Recirc (9-37,208) [1.4-18]	S6-3856-2SPL WIB-450A	PT	1	- -	-	-	
	SI Pps Cold Leg Loop 3 Recirc (9-215) [1.4-54]	S6-3857-2SPL WIB-455A	PT	1	- -	-	-	[1.4-19]
	SI Pps Cold Leg Loop 4 Recirc (9-216) [1.4-55]	S6-3858-2SPL WIB-464A	PT	1	- -	-	-	[1.4-20]
B9.32	1.5 Inch Nom. Diameter			(4)	(1) Sch'd			1.5 In. composite percent (25) [1.4-66]
	Boron Inj. Tk. Out. Loop 1 Cold Leg (7-30) [1.4-1] [1.4-66]	S6-1991-1.5SPL+ WIB-41A	PT	1	- -	-	-	
	Born Inj. Tk. Out. Loop 2 Cold Leg (7-31) [1.4-2] [1.4-69]	S6-1992-1.5SPL+ WIB-159A	PT	1	- -	-	-	[1.4-69]
	Born Inj Tk Out Loop 3 Cold Leg (7-31A) [1.4-3] [1.4-71]	S6-1993-1.5SPL+ WIB-273A	PT	1	- -	-	-	[1.4-71]

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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 B9.30 B9.32	Piping- Cont'd Branch Welds 2 In & Less (Diameter) 1.5 In. Nom. Dia.(Con't	Line No. & Branch Weld						
	Boron Inj Tk Out Loop 4 Cold Leg (7-30A) [1.4-4] [1.4-65]	S6-1994-1.5SPL+ WIB-117A	PT	1	1 Branch 360°	Three	25	[1.4-65]

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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 B9.40	Piping - Cont'd Socket Welds Socket welds are identified by system.	Specific weld identification numbers will be listed on ISI exam. schedules to be issued prior to each refueling outage						Scheduled in accordance with page (i) discussion
						Comp.%		
B9.40	2 Inch Nom. Diameter Letdown Line Loop 2 (7-14,15)	Line No. & ISI DWG. No. S6-24-3SPL [1.4-38]		(351) 2	(88) Sch'd 1 Socket 360° - -	(25) One - -	50 - -	Reducing 3 Inch Line to 2 inch sockets for LCV-459 (Valve)
	Charging Line Aux Spray (8-350,354)	S6-51-2SPL S6-4532-2SPL [1.4-40]	PT PT	52 4	5 Sockets 360° 4 5	One Two Three	9 16 25	
	Reac Cool Pp 1 Seal Wtr In (8-736)	S6-54-2 [1.4-42]	PT	12	1 Socket 360° 1 1	One Two Three	8 17 25	Includes Line S6-54-1.5 and (1) B9.21 Item
	Reac Cool Pp 2 Seal Wtr In (8-713)	S6-55-2 [1.4-43]	PT	12	1 Socket 360° 1 1	One Two Three	8 17 25	Includes Line S6-55-1.5 and (1) B9.21 Item
	Reac Cool Pp 3 Seal Wtr In (8-376)	S6-56-2 [1.4-44]	PT	14	1 Socket 360° 1 1	One Two Three	7 14 21	Includes Line S6-56-1.5 and (1) B9.21 Item
	Reac Cool Pp 4 Seal Wtr In (8-741)	S6-57-2 [1.4-45]	PT	19	1 Socket 360° 2 2	One Two Three	6 17 28	Includes Line S6-57-1.5 and (1)B9.21 Item

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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 B9.40	Piping Socket Welds Cont'd	Line No. & ISI DWG No.						
B9.40	Loop 1 Cold Leg Drain RCDT (7-218)	S6-958-2SPL+ [1.4-46]	PT	6	1 Socket 360°	One	17	
	Loop 2 Cold Leg Drain RCDT (7-219)	S6-959-2SPL+ [1.4-47]	PT	7	1 Socket 360° 1	Two Three	14 29	Drain Off Letdown Line S6-24-3
	Loop 3 Cold Leg Drain RCDT (7-214)	S6-960-2SPL+ [1.4-48]	PT	6	1 Socket 360°	One	17	
	Loop 4 Cold Leg Drain RCDT (7-215)	S6-961-2SPL+ [1.4-49]	PT	11	1 Socket 360° 1 1	One Two Three	9 18 27	

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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 B9.40	Piping Socket Welds Cont'd	Line No. & ISI DWG No.						
B9.40	SI Pp 1-1 Inj Hot Leg Loop 1 (9-278)	S6-3863-2 [1.4-50]	PT	5	1 Socket 60°	Two	20	
	SI Pp 1-1 Inj Hot Leg Loop 2 (9-279)	S6-3864-2 [1.4-51]	PT	5	1 Socket 360°	One	20	
	Safety Inj Hot Leg Loop 3 (9-218)	S6-1976-2 [1.4-52]	PT	8	1 Socket 360° 1	One Two	13 25	
	Safety Inj Hot Leg Loop 4 (9-217)	S6-1990-2 [1.4-53]	PT	10	1 Socket 360° 1	One Two	10 20	
	SI Pps Cold Leg Loop 1 Recirc (9-226)	S6-3855-2SPL [1.4-17]	PT	5	1 Socket 360°	Three	20	
	SI Pps Cold Leg Loop 2 Recirc (9-37,208)	S6-3856-2SPL [1.4-18]	PT	5	1 Socket 360°	Three	20	
	SI Pps Cold Leg Loop 3 Recirc (9-215)	S6-3857-2SPL [1.4-54]	PT	9	1 Socket 360° 1	One Two	11 22	
	SI Pps Cold Leg Loop 4 Recirc (9-216)	S6-3858-2SPL [1.4-55]	PT	15	1 Socket 360° 1 2	One Two Three	7 13 27	

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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 B9.40	Piping - Cont'd Socket Welds Cont'd	Line No. & ISI DWG. NO.						
B9.40	Loop 1 Hot Leg RTD Conn Hdr (7-221)	S6-1139-2SPL [1.4-56]	PT	19	1 Socket 360° 2 2	One Two Three	5 15 26	
	Loop 2 Hot Leg RTD Conn Hdr (7-224)	S6-1145-2SPL [1.4-57]	PT	19	1 Socket 360° 2 2	One Two Three	5 15 26	
	Loop 3 Hot Leg RTD Conn Hdr (7-231)	S6-1151-2SPL [1.4-58]	PT	19	1 Socket 360° 2 2	One Two Three	5 15 26	
	Loop 4 Hot Leg RTD Conn Hdr (7-230)	S6-1157-2SPL [1.4-59]	PT	21	2 Socket 360° 2 2	One Two Three	10 19 28	
	Loop 1 Cold Leg RTD Conn (7-220)	S6-1140-2SPL [1.4-60]	PT	15	1 Socket 360° 1 2	One Two Three	7 13 27	
	Loop 2 Cold Leg RTD Conn (7-222)	S6-1146-2SPL [1.4-61]	PT	15	1 Socket 360° 1 2	One Two Three	7 13 27	
	Loop 3 Cold Leg RTD Conn (7-236)	S6-1152-2SPL [1.4-62]	PT	19	1 Socket 360° 2 2	One Two Three	5 16 26	
	Loop 4 Cold Leg RTD Conn (7-234)	S6-1159-2SPL [1.4-63]	PT	17	2 Sockets 360° 2	One Two	12 24	

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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	Line No. &					Comp.	Note comment
B9.40	Sockets Welds Cont'd	ISI DWG. No.		(196)	(50) Sch'd		% (26)	From pg. 20 Item B9.21
B9.40	1.5 In. Nom. Diameter						B.W.=Butt Weld	
	Boron Inj Tk Out Loop 1 Cold Leg (9-212,240,231)	S6-1991-1.5SPL+ [1.4-64] [1.4-65]	PT	42	3 Sockets 360° 4 4 (3)	One Two Three	7 17 26	Includes (3) B9.21 Items- Butt Welds
	Boron Inj Tk Out Loop 2 Cold Leg (9-210,241,228)	S6-1992-1.5SPL+ [1.4-67] [1.4-68] [1.4-69]	PT	71	6 Sockets 360° 6 6 360°	One Two Three	8 17 25	Includes (2) B9.21 items Butt Welds
	Boron Inj Tk Out Loop 3 Cold Leg (9-209,239)	S6-1993-1.5SPL+ [1.4-70] [1.4-71]	PT	48	4 Sockets 4 4	One Two Three	8 17 25	Includes (3) B9.21 Items Butt Welds
	Boron Inj Tk Out Loop 4 Cold Leg (9-212,240)	S6-1994-1.5SPL [1.4-64] [1.4-65]	PT	35	3 Sockets 360° 3 3	One Two Three	9 17 26	Includes (2) B9.21 items- Butt Welds

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MAJOR ITEM: Pipe Supports
TABLE: 1.4
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Category B-K-1, welded support attachments to the pressure boundary, (Items B 10.10, B 10.20 and B 10.30) 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 B 11.30) are scheduled together with the corresponding pipe (B 10.10, B 11.10) system. Supports for pumps (B 10.20, B 11.20) 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 Section XI.

†NOTE: Hanger Section totals have been updated to reflect changes made during the Seismic Reverification Program.

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K-1	Integrally Welded Attachments (To Pressure Boundary)				Exam'n area meets or exceeds req'ts of figures IWB-2500-13 and IWB-2500-15			
B10.10 B10.20 B10.30	Piping Pumps(See Table 1.5) Valves	(Attach't)					†Note Comments on page ii of 57	
B-K-2	Support Components	(Supports)						Items B10.30 and B11.30 (Valve Supports) are included in this section and scheduled in conjunction with items B10.10 and Item B11.10 (Pipe Supports)
B11.10 B11.20 B11.30	Piping Pumps (See Table 1.5) Valves				Reference IWF-1300 Winter '78 Add. For Clarification of B-K-2 exam. area			
NOTE: The total number of supports on the line appears in the B-K-2 column								
	29,&27.5 In. Nom. Dia.	Line No. & ISI DWG No.		(0)	B-K-2		B-K-2	
	Reactor Coolant Out Loop 1 (7-30) [1.4-1]	*1-29SPL,and *9-27.5	-	-			-	
	Reactor Coolant Out Loop 2 (7-31) [1.4-2]	*2-29SPL, and *10-27.5	-	-			-	
	Reactor Coolant Out Loop 3 (7-31A) [1.4-3]	*3-29SPL, and *11-27.5	-	-			-	
	Reactor Coolant Out Loop 4 (7-30A) [1.4-4]	*4-29SPL, and *12-27.5	-	-			-	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K-1 B-K-2	Support Members Component Supports							
B10.10 B11.10	Integrally Welded Attach. Support Components 31 In. Nom. Dia.	Line No. & ISI DWG No.		(8)				
B10.10 B11.10	Reactor Coolant Pump Suction Loop 1 (07-30)	*5-31 [1.4-1]	VT-3	2	B-K-2 1 Support 100% 1	One One	B-K-2 11 25	
	Reactor Coolant Pump Suction Loop 2 (07-31)	*6-31 [1.4-2]	VT-3	2	B-K-2 1 Support 100% 1	One Two	37 50	
	Reactor Coolant Pump Suction Loop 3 (07-31A)	*7-31 [1.4-3]	VT-3	2	B-K-2 1 Support 100% 1	Two Three	62 75	
	Reactor Coolant Pump Suction Loop 4 (07-30A)	*8-31 [1.4-4]	VT-3	2	B-K-2 1 Support 100% 1	Three Three	87 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports- Cont'd				B-K-2 requirements include visual exam. (VT-3) of welded attachments including those in category B-K-1		This column identifies support # when B-K-1 exam req'ts are applicable	
B10.10 B11.10	Support Attach't Support Components							B-K-1 Exam Requirements Applicable To:
	14 Inch Nom. Diameter	Line No. & ISI DWG No.			Note: VT-4 Scheduled as applicable to individual components			Seismic Constr. Mark No. / Weld No.
B10.10 B11.10	Pressurizer Surge Line (Loop 2)(8-59A)	*16-14SPL [1.4-5]	VT-3 (VT-4)	6	B-K-2 2 Supports 100% 2 2	 One Two Three	B-K-2 33 66 100	
	Hot Leg Recirc Before V-8702 (7-4)	S6-109-14SPL [1.4-6]	PT	1	B-K-1 100%	One		56N-6V/Param't
			VT-3 (VT-4)	7	B-K-2 2 Supports 100% 2 3	 One Two Three	B-K-2 29 57 100	
	Loop 4 Hot Leg Before V-8701 (10-11)	S6-1665-14SPL [1.4-7]	PT	2	B-K-1 B-K-2	One	B-K-2	56N-4R/Param't 56N-5V/Param't
			VT-3 (VT-4)	6	2 Supports 100% 2 2	One Two Three	33 67 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports- Cont'd							B-K-1 Exam requirements -Applicable to Mark No. Weld No.
B10.10 B11.10	Support Attach't Support Components	Line No. &						
	10 Inch Nom. Diameter	ISI DWG. No.						
B10.10 B11.10	Accumulator Injection Loop 1 (9-16,17)	S6-253-10SPL+ [1.4-8]	VT-3 (VT-4)	6	B-K-2 2 Supports 100% 2 2	 One Two Three	B-K-2 33 66 100	
	Accumulator Injection Loop 2 (9-21)	S6-254-10SPL+ [1.4-9]	PT VT-3 (VT-4)	1 3	B-K-1 B-K-2 1 Supports 100% 1 1	Two B-K-2 One Two Three	 B-K-2 33 66 100	52-24V/Param't
NOTE: Welded Attachment 6-6 RR is not part of a support member								
	Accumulator Injection Loop 3 (9-19)	S6-255-10SPL+ [1.4-10]	PT VT-3 (VT-4)	1 1	B-K-1 B-K-2 1 Support 100%	Three One	 B-K-2 100	57N/4V/Param't
	Accumulator Injection Loop 4 (9-18)	S6-256-10SPL+ [1.4-11]	PT VT-3 (VT-4)	1 6	B-K-1 B-K-2 2 Supports 100% 2 2	Three One Two Three	 B-K-2 33 66 100	57N-1V/Param't

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	8 Inch Nom. Diameter	Line No. & ISI DWG No.						
B10.10 B11.10	SIS To RCS Loop 1 Hot Leg (10.16)	S6-2575-8 [1.4-12]	VT-3 (VT-4)	2	B-K-2 1 Support 100% - 1	 One Two Three	B-K-2 50 50 100	
	SIS To RCS Loop 2 Hot Leg (10-16)	S6-2576-8 [1.4-12]	VT-3 (VT-4)	4	B-K-2 1 Support 100% 1 2	 One Two Three	B-K-2 25 50 100	
	6 Inch Nom. Diameter							
B10.10 B11.10	Safety Inj Loop 1 Hot Leg (10-17)	S6-235-6SPL+ [1.4-13]	VT-3 (VT-4)	6	B-K-2 2 Supports 100% 2 2	 One Two Three	B-K-2 33 66 100	
	Safety Inj Loop 2 Hot Leg (10-18)	S6-236-6SPL+ [1.4-14]	VT-3 (VT-4)	7	B-K-2 3 Supports 100% 2 2	 One Two Three	B-K-2 43 71 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd	Line No. & SIS DWG No.						
					B-K-2		B-K-2	
B11.10	Safety Inj Loop 3 Hot Leg (9-33)	S6-237-6SPL+ [1.4-15]	VT-3 (VT-4)	11	3 Supports 100% 4 4	One Two Three	27 64 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							B-K-1 Exam requirements applicable to Mark No. / Weld No.
B10.10 B11.10	Support Attach't Support Components							
	6 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.						
	Safety Inj Loop 4 Hot Leg (9-34,7-4)	S6-238-6SPL+ [1.4-16] [1.4-6]	PT VT-3 (VT-4)	1 7	B-K-1 B-K-2 2 Supports 100% 3 2	One One Two Three	B-K-2 27 71 100	56N-15V/Param't
B10.10	RHR Pp 1-1 Inj Cold Leg 1 (9-16,17) (9-36,226)	S6-3844-6SPL+ [1.4-17]	PT VT-3 (VT-4)	1 9	B-K-1 B-K-2 3 Supports 100% 3 3	Two One Two Three	B-K-2 33 66 100	42-41V/Param't
	RHR Pp 1-1 Inj Cold Leg 2 (9-37,208)	S6-3845-6SPL+ [1.4-18]	PT VT-3 (VT-4)	1 10	B-K-1 B-K-2 3 Supports 100% 3 4	Three One Two Three	B-K-2 30 60 100	42-44V/Param't
	RHR Pp 1-2 Inj Cold Leg 3 (9-43)	S6-3846-6SPL+ [1.4-19]	VT-3 (VT-4)	9	B-K-2 3 Supports 100% 3 3	 One Two Three	B-K-2 33 66 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd	Line No. & ISI DWG No.						B-K-1 Exam Requirements Applicable to: Mark No. Weld No.
B10.10 B10.11	Support Attach't Support Components							
	RHR Pp 1-2 Inj Cold Leg 4 (9-42)	S6-3847-6SPL+ [1.4-20]	PT VT-3 VT-4	1 12	B-K-1 B-K-2 4 Supports 100% 4 4	Three One Two Three	B-K-2 33 66 100	58N-60R/X309A-H

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							
B10.10 B10.11	Support Attach't Support Components							
	6 Inch Nom. Diameter (Con't)	LINE NO. & ISI DWG No.						
B10.10 B10.11	Pressurizer RV-8010A Inlet (7-27)	S6-729-6SPL+ [1.4-21]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	 One Two	B-K-2 50 100	(Vlv;B11.30 Item) (48-1R)
	Pressurizer RV-8010B Inlet (7-28)	S6-728-6SPL+ [1.4-22]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	 Two Three	B-K-2 50 100	(Vlv;B11.30 Item) (48-12R)
	Pressurizer RV-8010C Inlet (07-29)	S6-727-6SPL+ [1.4-23]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	 One Three	B-K-2 50 100	(Vlv;B11.30 Item) (48-17R)
	Pressurizer Power RV Inlet (07-25)	S6-730-6SPL [1.4-24]	VT-3 (VT-4)	3	B-K-2 1 Support 100% 1 1	 One Two Three	B-K-2 33 66 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							B-K-1 Exam Requirements
B10.10 B11.10	Support Attach't Support Components							-Applicable to-
	4 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.						Mark No. / Weld No.
B10.10 B10.11	Pressurizer RV PCV-455C Inlet (7-25)	S6-4081-4SPL [1.4-24]	VT-3 (VT-4)	1	B-K-2 - - 1 Support 100%	 One Two Three	B-K-2 - - 100	
	Loop 1 Spray Line	S6-13-4SPL [1.4-27] [1.4-26] [1.4-25]	PT VT-3	2 21	B-K-1 100% B-K-2 7 Supports 100% 7 7	Two One Two Three	B-K-1 100 B-K-2 33 67 100	52-33A X-408B (X 408 A,C not accessible) 41-71A X409B (X409A not accessible)
	Loop 2 Spray Line (8-5.6)	S6-14-4SPL [1.4-28] [1.4-25]	VT-3 (VT-4)	24	B-K-2 8 Supports 100% 8 8	 One Two Three	B-K-2 33 67 100	
	Pressurizer Spray Line (7-9)	S6-15-4SPL [1.4-29]	VT-3	20	B-K-2 6 Supports 100% 7 7	 One Two Three	B-K-2 30 65 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K-1 Exam Requirements
B-K	Supports-Cont'd							
B10.10 B11.10	Support Attach't Support Components							Applicable to Mark No. / Weld No.
	3 Inch Nom. Diameter	Line No. & ISI DWG No.						
B10.10	Loop 1 Hot Leg RTD Conn (7-23)	S6-3488-3SPL [1.4-30]	PT VT-3 (VT-4)	1 6	B-K-1 B-K-2 2 Support 100% 2 2	Three One Two Three	B-K-2 33 67 100	46-11R/X356A1-D1 X407A-D
	Loop 1 Cold Leg RTD Conn (7-23)	S6-3798-3SPL [1.4-30]	PT VT-3 (VT-4)	1 3	B-K-1 B-K-2 1 Support 100% 1 1	One One Two Three	B-K-2 33 66 100	46-9V/X412A-D
	Loop 1 RTD Manifold Ret Hdr. (7-23)	S6-1141-3SPL [1.4-30]	VT-3 (VT-4)	9	B-K-2 3 Supports 100% 3 3	 One Two Three	B-K-2 33 67 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-K	Supports-Cont'd							B-K-1 Exam Requirements Applicable to
B10.10	Support Attach't							
B11.10	Support Components							Mark No: Weld No.
	3 Inch Nom. Diameter (cont'd)	Line No. & ISI DWG. NO.						
B10.10	Loop 2 Hot Leg RTD Conn (7-24)	S6-3489-3SPL [1.4-31]	PT VT-3 (VT-4)	1 5	B-K-1 B-K-2 2 Supports 100% 2 1	One One Two Three	100 B-K-2 40 80 100	47-15V X 410A-D
	Loop 2 Cold Leg RTD Conn (7-24)	S6-3799-3SPL [1.4-31]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	 Two Three	B-K-2 50 100	
	Loop 2 RTD Manifold Ret Hdr (7-24)	S6-1147-3SPL [1.4-31]	VT-3 (VT-4)	8	B-K-2 3 Supports 100% 3 2	 One Two Three	B-K-2 38 75 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	3 Inch Nom. Diameter (Cont'd	Line No. & ISI DWG No.						
B10.10	Loop 3 Hot Leg RTD Conn (7-21)	S6-3495-3SPL [1.4-32]	VT-3 (VT-4)	8	B-K-2 3 Support 100% 3 2	 One Two Three	B-K-2 38 75 100	
	Loop 3 Cold Leg RTD Conn (7-21)	S6-3800-3SPL [1.4-32]	VT-3 (VT-4)	5	B-K-2 1 Support 100% 2 2	 One Two Three	B-K-2 20 60 100	
	Loop 3 RTD Manifold Ret Hdr (7-24)	S6-1153-3SPL [1.4-32]	VT-3 (VT-4)	7	B-K-2 2 Support 100% 2 3	 One Two Three	B-K-2 29 57 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							B-K-1 Exam Requirements
B10.10 B11.10	Support Attach't Support Components							Applicable to
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.					Mark No. / Weld No.	
B10.10	Loop 4 Hot Leg RTD Conn (7-22)	S6-3496-3SPL [1.4-33]	VT-3 (VT-4)	10	B-K-2 3 Support 100% 3 4	 One Two Three	B-K-2 30 60 100	
	Loop 4 Cold Leg RTD Conn (7-22)	S6-3801-3SPL [1.4-33]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	 Two Three	B-K-2 100 100	
	Loop 4 RTD Manifold Ret Hdr (7-22)	S6-1158-3SPL [1.4-33]	VT-3 (VT-4)	8	B-K-2 2 Supports 100% 3 3	 One Two Three	B-K-2 25 63 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							
B10.10 B11.10	Support Attach't Support Component							
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.						
B10.10 B11.10	Charging Line Loop 4 (8-61)	S6-246-3SPL [1.4-34]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	One	B-K-2 100	
	Charging Line Loop 3 (8-59)	S6-50-3SPL [1.4-35]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	Three	B-K-2 100	
	Boron Inj Cold Leg Hdr (9-35)	S6-1995-3 and S6-1016-3 [1.4-36]	VT-3 (VT-4)	10	B-K-2 3 Supports 100% 3 4	One Two Three	B-K-2 30 60 100	
	Letdown Line Loop 2 (7-14,15)	S6-24-3SPL [1.4-37] [1.4-38]	VT-3 (VT-4)	9	B-K-2 3 Supports 100% 3 3	One Two Three	B-K-2 33 67 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							B-K-1 Exam Requirements
B10.10 B11.10	Support Attach't Support Components							Applicable to
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.						Mark No. / Weld No.
B10.10 B11.10	Pressurizer Pwr RV PCV-474 (7-25)	S6-1171-3SPL+ [1.4-24]	VT-3 (VT-4)	8	B-K-2 2 Support 100% 3 3	 One Two Three	B-K-2 25 63 100	
	Pressurizer Pwr RV PCV-455C (7-25)	S6-1172-3SPL+ [1.4-24]	PT VT-3 (VT-4)	1 5	B-K-1 B-K-2 2 Supports 100% 2 1	Two One Two Three	100 B-K-2 40 80 100	48-29A/FWX301A-C
	Pressurizer Pwr RV PCV-456 (7-26)	S6-1195-3SPL+ [1.4-39]	VT-3 (VT-4)	8	B-K-2 3 Support 100% 3 2	 One Two Three	B-K-2 38 75 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	2 Inch Nom. Diameter	Line No. & ISI DWG. No.						
B10.10 B11.10 (B11.30)	Charging Line Aux Spray (8-350)	S6-51-2SPL+ S6-4532-2SPL [1.4-40] [1.4-41]	VT-3 (VT-4)	38	B-K-2 13 Supports 100% 13 12	 One Two Three	B-K-2 34 68 100	(V1v;B11.30 Item) (22-70SL)
	Reac Cool Pp 1 Seal Wtr In (8-736)	S6-54-2 (And) 1.5 [1.4-42]	VT-3 (VT-4)	3	B-K-2 1 Support 100% 1 1	 One Two Three	B-K-2 33 66 100	
	Reac Cool Pp 2 Seal Wtr In (8-713)	S6-55-2 (And) 1.5 [1.4-43]	VT-3 (VT-4)	3	B-K-2 1 Support 100% 1 1	 One Two Three	B-K-2 33 66 100	
	Reac Cool Pp 3 Seal Wtr In (8-376)	S6-56-2 (And) 1.5 [1.4-44]	VT-3 (VT-4)	4	B-K-2 2 Support 100% 1 1	 One Two Three	B-K-2 50 75 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components 2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.						
	Reac Cool Pp 4 Seal Wtr In (8-741)	S6-57-2 (And) 1.5 [1.4-45]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	One	B-K-2 100	
B10.10 B11.10	Loop 1 Cold Leg Drain RCDT (7-218)	S6-958-2SPL+ [1.4-46]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	One	B-K-2 100	
	Loop 2 Cold Leg Drain RCDT (7-219)	S6-959-2SPL+ [1.4-47]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	One Two	B-K-2 50 100	
	Loop 3 Cold Leg Drain RCDT (7-214)	S6-960-2SPL+ [1.4-48]	VT-3 (VT-4)	1	B-K-2 1 Support 100%	Three	B-K-2 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd								
B10.10 B11.10	Support Attach't Support Components								
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.							
	Loop 4 Cold Leg Drain RCDT (7-215)	S6-961-2SPL+ [1.4-49]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Two	B-K-2 100	
B10.10 B11.10	SI Pp 1-1 Inj Hot Leg Loop 1 (9-278)	S6-3863-2 [1.4-50]	VT-3 (VT-4)	1	B-K-2 - - 1 Support	- - 100%	One Two Three	B-K-2 - - 100	
	SI Pp 1-1 Inj Hot Leg Loop 2 (9-279)	S6-3864-2 [1.4-51]	-	-			-	-	No Supports In Boundary
	Safety Inj Hot Leg Loop 3 (9-218)	S6-1976-2 [1.4-52]	VT-3 (VT-4)	2	B-K-2 1 Support - 1	100% -	One Two Three	B-K-2 50 50 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd								
B10.10 B11.10	Support Attach't Support Components								
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.							
	Safety Inj Hot Leg Loop 4 (9-217)	S6-1990-2 [1.4-53]	-	-	-	-	-	-	No supports in boundary
B10.10 B11.10	SI Pps Cold Leg Loop 1 Recirc (9-36,226)	S6-3855-2SPL+ [1.4-17]	-	-	-	-	-	-	No supports in boundary
	SI Pps Cold Leg Loop 2 Recirc (9-37,208)	S6-3856-2SPL+ [1.4-18]	-	-	-	-	-	-	No supports in boundary
	SI Pps Cold Leg Loop 3 Recirc (9-215)	S6-3857-2SPL+ [1.4-54]	VT-3 (VT-4)	4	B-K-2 1 Support 1 2	100%	One Two Three	B-K-2 25 50 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports-Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.						
	SI Pps Cold Leg Loop 4 Recirc (9-216)	S6-3858-2SPL+ [1.4-55]	VT-3 (VT-4)	6	B-K-2 2 Support 100% 2 2	 One Two Three	B-K-2 33 66 100	
B10.10 B11.10	Loop 1 Hot Leg RTD Conn Hdr (7-221)	S6-1139-2SPL [1.4-56]	VT-3 (VT-4)	2	B-K-2 1 Support 100% 1	 One Two	B-K-2 50 100	
	Loop 2 Hot Leg RTD Conn Hdr (7-224)	S6-1145-2SPL [1.4-57]	VT-3 (VT-4)	4	B-K-2 1 Support 100% 1 2	 One Two Three	B-K-2 25 50 100	
	Loop 3 Hot Leg RTD Conn Hdr (7-231)	S6-1151-2SPL [1.4-58]	VT-3 (VT-4)	3	B-K-2 1 Support 100% 1 1	 One Two Three	B-K-2 33 67 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.						
	Loop 4 Hot Leg RTD Conn Hdr (7-230)	S6-1157-2SPL [1.4-59]	VT-3 VT-4	2	BK-2 1 SUPPORT 100%	Two	B-K-2 50	
					1	Three	100	
B10.10 B11.10	Loop 1 Cold Leg RTD Conn (7-220)	S6-1140-2SPL [1.4-60]	VT-3 (VT-4)	4	B-K-2 1 Support 100%	One	B-K-2 25	
					2	Two	75	
					1	Three	100	
	Loop 2 Cold Leg RTD Conn (7-222)	S6-1146-2SPL [1.4-61]	VT-3 (VT-4)	5	B-K-2 2 Supports 100%	One	B-K-2 40	
					2	Two	80	(Vlv;B11.30 Item)
					1	Three	100	(10.73 SL)
	Loop 3 Cold Leg RTD Conn (7-236)	S6-1152-2SPL [1.4-62]	VT-3 (VT-4)	5	B-K-2 2 Supports 100%	One	B-K-2 40	
					1	Two	60	
					2	Three	100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.						
	Loop 4 Cold Leg RTD Conn (7-234)	S6-1159-2SPL [1.4-63]	VT-3 (VT-4)	3	B-K-2 1 Support 100% 1 1	 One Two Three	B-K-2 33 66 100	
	1.5 Inch Nom. Diameter							
B10.10 B11.10	Boron Inj Tk Out Loop 1 Cold Leg (9-240) (9-212) (9-231)	S6-1991-1.5 [1.4-64] [1.4-65] [1.4-66]	VT-3 (VT-4)	16	B-K-2 5 Supports 100% 5 6	 One Two Three	B-K-2 31 63 100	
	Boron Inj Tk Out Loop 2 Cold Leg (9-210) (9-241) (9-228)	S6-1992-1.5 [1.4-67] [1.4-68] [1.4-69]	VT-3 (VT-4)	32	B-K-2 10 Supports 100% 10 12	 One Two Three	B-K-2 31 63 100	

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MAJOR ITEM: Pipe Supports (B-K-1, B-K-2)
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-K	Supports - Cont'd							
B10.10 B11.10	Support Attach't Support Components							
	1.5 Inch Nom. Diameter	Line No. & ISI DWG. No.						
	Boron Inj Tk Out Loop 3 Cold Leg (9-209) (9-239)	S6-1993-1.5 [1.4-70] [1.4-71]	VT-3 (VT-4)	19	B-K-2 6 Supports 100% 7 6	 One Two Three	B-K-2 31 68 100	
	Boron Inj Tk Out Loop 4 Cold Leg (9-212) (9-240)	S6-1994-1.5 [1.4-64] [1.4-65]	VT-3 (VT-4)	13	B-K-2 5 Supports 100% 4 4	 One Two Three	B-K-2 38 69 100	

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ASME SECTION XI SYSTEMS-CLASS 1

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 1-1 Ser. No. 562 Pump 1-2 Ser. No. 507 Pump 1-3 Ser. No. 508 Pump 1-4 Ser. No. 509	Flange Bolting Pump chosen for examination will depend on maintenance schedule	-	-	-	-	-	PUMPS IWB-2500-1 Footnote (2) requires threads in base material & ligaments to be examined when disassembled. Deferral of inspection to end of interval is allowed.
B6.180	Pump Flange Bolts and Studs, In Place, Pump 1-2	Bolts No. 1 Thru No. 24	UT	24	8 Bolts 100% 8 Bolts 8 Bolts	One Two Three	33 66 100	Footnote 4 of Category B-G-1 Ref. B-L-1 which specifies one pump.
B6.190	Pump Flange Bolts and Studs, When Removed, Pump 1-2	[1.5-1]	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 in Ligaments When Bolts are Removed)

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MAJOR ITEM: PUMPS (B-G-2)
TABLE: 1.5
PAGE 2 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 - 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 1-1	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	12	4 Bolts 100% 4 4	One Two Three	33 66 100	
B7.60	Bolts, Studs, & Nuts Pump 1-2	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	12	4 Bolts 100% 4 4	One Two Three	33 66 100	
B7.60	Bolts, Studs, & Nuts Pump 1-3	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	12	4 Bolts 100% 4 4	One Two Three	33 66 100	
B7.60	Bolts, Studs, & Nuts Pump 1-4	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	12	4 Bolts 100% 4 4	One Two Three	33 66 100	

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MAJOR ITEM: PUMPS (B-K-1)(B-K-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 IWB-2500-15 (Typical Design)			[*] ISI DWG. Page No.
B-K-1	Support Members							
B10.20	Integrally Welded Attachments (To Pressure Bound.)							
B10.20	Welded Attachments Pump 1-2	WELDS #1, #2, #3 *[1.5-1]	PT	3	1 Lug 100% 1 Lug 100% 1 Lug 100%	One Two Three	33 67 100	Welded attachm't req'd 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 1-1	Support Components	VT-3	(†)		One	25	(†) B11.20 Items include all pump support members (support lugs, bolts, & column, lateral support members)
B11.20	Support Components Pump 1-2		VT-3	(†)		Two	50	

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MAJOR ITEM: PUMPS (B-K-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							
B-K-2	Support Components (Continued)	Support Components						
B11.20	Support Components Pump 1-3		VT-3	(†)		Three	75	(†) Includes all pump support members.
B11.20	Support Components Pump 1-4		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	DWG. REF. DC663207-34 *[1.5-1]			The exam'n method shown in IWB-2500-1 (S-78) was corrected by ERRATA (W-78) Deleting surface req't.			[*] ISI DWG. Page No.
B-L-1	Pressure Retaining Welds Pump Casing Welds	Pump Casing Welds			Exam'n area meets or exceeds req'ts of Figure IWB-2500-16			
B12.10	Reactor Coolant Pump 1-1, 1-2, 1-3, or 1-4, dependent on maintenance schedule.	Pump Body Girth Weld	RT	1	1 Pmp Girth Weld	Three	100%	RT of Girth Weld as Technology allows.
B-L-2	Pump Casing Interior	Interior Surfaces						
B12.20	Reactor Coolant Pump 1-1, 1-2, 1-3 or 1-4, dependent on maintenance schedule.	Internal Surfaces	VT-1	1	1 Interior 100% Pump Surface	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: VALVES (B-G-1)(B-G-2)
TABLE: 1.6
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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
	Valves							[*] ISI DWG. Page No.
B-G-1	Pressure Retaining Bolting (Larger Than 2-inch Dia.)							
B6.210	Bolts and Studs, in Place	-	-	-	- -	-	-	B6.210, B6.220 And B6.230 Items Not Applicable
B6.220 And B6.230	Bolts and Studs, When Removed Bolting				Percentage by System Size			
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less)	Line No. / Valve No.(s)			Bonnet Bolting			
B7.70	14 Inch Nom. Dia.			(2)				Manufacturer & Style
	Hot Leg Recirc Before V-8702 (7-4) [1.4-6]*	S6-109-14SPL V-8702	VT-1	1	16 Studs 100% and Nuts 100%	One	50	Copes-Vulcan GM-48SEZ
	Loop 4 Hot Leg Before V-8701 (10-11) [1.4-7]	S6-1665-14SPL V-8701	VT-1	1	16 Studs 100% and Nuts 100%	Two	100	Copes-Vulcan GM-48SEZ (Note B12.40)

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd.							
B-G-2	Pressure Retaining Bolting							
	(2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	10 Inch Nom. Dia.				Bonnet Bolting			Manufacturer & Style
		Line No. Valve No.(s)						
	Accumulator Injection Loop 1	S6-253-10SPL		(8)				
	(9-16,17)	V-8956A	VT-1	1	16 Studs 100%	One	13	Darling
	[1.4-8]	V-8948A	VT-1	1	16 Studs 100% and Nuts 100%	Two	38	10C48Z
	Accumulator Injection Loop 2	S6-254-10SPL						
	(9-21)	V-8956B	VT-1	1	16 Studs 100%	Two	50	Darling
	[1.4-9]	V-8948B	VT-1	1	16 Studs 100% and Nuts 100%	Three	75	10C48Z
	Accumulator Injection Loop 3	S6-255-10SPL						
	(9-19)	V-8956C	VT-1	1	16 Studs 100%	One	25	Darling
	[1.4-10]	V-8948C	VT-1	1	16 Studs 100% and Nuts	Three	88	10C48Z
	Accumulator Injection Loop 4	S6-256-10SPL						
	(9-18)	V-8956D	VT-1	1	16 Studs 100%	Two	63	Darling
	[1.4-11]	V-8948D	VT-1	1	16 Studs and Nuts	Three	100	10C48Z

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	8-inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	SIS to RCS Loop 1 Hot Leg (10-16) [1.4-12]	S6-2575-8 V-8740A	VT-1	1	16 Studs and Nuts 100%	One	50	Darling 8C48Z
	SIS to RCS Loop 2 Hot Leg (10-16) [1.4-12]	S6-2576-8 V-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 (10-17) [1.4-13]	S6-235-6SPL V-8949A	VT-1	(11) 1	12 Studs and Nuts 100%	One	25	Velan 6C58
	Safety Inj Loop 2 Hot Leg (10-18) [1.4-14]	S6-236-6SPL+ V-8949B	VT-1	1	12 Studs and Nuts 100%	Two	50	Velan 6C58
	Safety Inj Loop 3 Hot Leg (9-33) [1.4-15]	S6-237-6SPL+ V-8949C	VT-1	1	12 Studs and Nuts 100%	Three	75	Velan 6C58

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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-G-2	VALVES - Cont'd Pressure Retaining Bolting (2-inch Dia. and Less Bolts, Studs & Nuts)							
B7.70	6-inch Nom. Dia. - Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Safety Inj Loop 4 Hot Leg (9-34) [1.4-6]	S6-238-6SPL+ V-8949D	VT-1	1	12 Studs 100% and Nuts	Three	100	Velan 6C58
	RHR Pp1-1 Inj Cold Leg 1 (9-16,17) [1.4-17]	S6-3844-6SPL V-8818A	VT-1	1	12 Studs 100% and Nuts	One	25	Velan 6C58
	RHR Pp1-1 Inj Cold Leg 2 (9-37,208) [1.4-18]	S6-3845-6SPL V-8818B	VT-1	1	12 Studs 100% and Nuts	Two	50	Velan 6C58
	RHR Pp1-2 Inj Cold Leg 3 (9-43) [1.4-19]	S6-3846-6SPL V-8818C	VT-1	1	12 Studs 100% and Nuts	Three	75	Velan 6C58

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	VALVES - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	6-in. Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	RHR Pp 1-2 Inj Cold Leg 4 (9-42) [1.4-20]	S6-3847-6SPL V-8818D	VT-1	1	12 Studs 100% and Nuts	Three	100	Velan 6C58
	Pressurizer RV-8010A Inlet (7-27) [1.4-21]	S6-729-6 RV-8010A	VT-1	1	12 Studs 100% and Nuts	One	33	Crosby 6RV58MSB
	Pressurizer RV-8010B Inlet (7-28) [1.4-22]	S6-728-6 RV-8010B	VT-1	1	12 Studs 100% and Nuts	Two	66	Crosby 6RV58MSB
	Pressurizer RV-8010C Inlet (7-29) [1.4-23]	S6-727-6 RV-8010C	VT-1	1	12 Studs 100% and Nuts	Three	100	Crosby 6RV58MSB
B7.70	4-inch Nom. Dia. Loop 1 Spray (7-6, 7-7, 7-8) [1.4-26]	S6-13-4SPL V-8033C V-8033D 1-PCV-455B	 VT-1 VT-1 VT-1	(6) 1 1 1	 12 Studs 100% 12 Studs 100% 8 Studs 100 and Nuts	 One Two Three	 33 66 100	Velan 4G58 4G58 Copes-Vulcan 4RA58RGA

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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-G-2	VALVES - Cont'd Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	4-inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 2 Spray (7-5, 7-6) [1.4-28] [1.4-25]	S6-14-4SPL V-8033A V-8033B 1-PCV-455A	 VT-1 VT-1 VT-1	 1 1 1	 12 Studs 100% 12 Studs 100% 8 Studs 100% and Nuts	 One Two Three	 33 66 100	Velan 4G58 4G58 Copes-Vulcan 4RA58RGA
B7.70	3-inch Nom. Dia. Loop 1 Hot Leg RTD Conn. (7-23) [1.4-30]	S6-3488-3SPL V-8073A	 VT-1	(22) 1	 12 Studs 100% and Nuts	 One	 25	Velan 3G58
	Loop 2 Hot Leg RTD Conn. (7-24) [1.4-31]	S6-3489-3SPL V-8073B	 VT-1	 1	 12 Studs 100% and Nuts	 Two	 50	Velan 3G58
	Loop 3 Hot Leg RTD Conn. (7-21) [1.4-32]	S6-3495-3SPL V-8073C	 VT-1	 1	 12 Studs 100% and Nuts	 Three	 75	Velan 3G58
	Loop 4 Hot Leg RTD Conn. (7-22) [1.4-33]	S6-3496-3SPL V-8073D	 VT-1	 1	 12 Studs 100% and Nuts	 Three	 100	Velan 3G58

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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-G-2	VALVES - Cont'd Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	3-inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 1 RTD Manifold Ret Hdr. (7-24) [1.4-30]	S6-1141-3SPL V-8074A	VT-1	1	12 Studs 100% and Nuts	One	25	Velan 3G58
	Loop 2 RTD Manifold Ret Hdr. (7-24) [1.4-31]	S6-1147-3SPL V-8074B	VT-1	1	12 Studs 100% and Nuts	Two	50	Velan 3G58
	Loop 3 RTD Manifold Ret Hdr. (7-21) [1.4-32]	S6-1153-3SPL V-8074C	VT-1	1	12 Studs 100% and Nuts	Three	75	Velan 3G58
	Loop 4 RTD Manifold Ret Hdr. (7-22) [1.4-33]	S6-1158-3SPL V-8074D	VT-1	1	12 Studs 100% and Nuts	Three	100	Velan 3G58
	Charging Line Loop 4 (8-61) [1.4-34]	S6-246-3SPL V-8378B V-8379B	VT-1 VT-1	1 1	12 Studs 100% 12 Studs and Nuts	One Two	50 100	Velan 3C58 3C58

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	3-inch Nom. Dia. - Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Charging Line Loop 3 (8-59) [1.4-35]	S6-50-3SPL						Velan
	V-8379A		VT-1	1	12 Studs 100%	Two	50	3C58
	(CVCS Alternate) V-8378A		VT-1	1	12 Studs 100%	Three	100	3C58
	Boron Inj Cold Leg Hdrs (9-35) [1.4-36]	S6-1016-3						Velan
	V-8820		VT-1	1	12 Studs and Nuts 100%	One	100	3C58
	Letdown Line Loop 2 (7-14, 7-5) [1.4-37] [1.4-38]	S6-24-3SPL+						Velan
	V-8076		VT-1	1	2 Studs 100%	One	33	3T58
	1-LCV-459(2")		VT-1	1	6 Studs 100%	Two	66	Copes-Vulcan(2")
	1-LCV-460		VT-1	1	8 Studs and Nuts 100%	Three	100	Masoneilan 3IA58RGP
	Pressurizer Power RV PCV-474 (7-25) [1.4-24]	S6-1171-3SPL+						Velan
	V-8000A		VT-1	1	12 Studs 100%	Two	50	3GM58FN
	1-PCV-474		VT-1	1	8 Studs and Nuts 100%	Three	100	Masoneilan 3IA58RGP
	Pressurizer Power RV PCV-455C (7-24) [1.4-24]	S6-1172-3SPL+						Velan
	V-8000B		VT-1	1	12 Studs 100%	Two	50	3GM58FN
	1-PCV-455C		VT-1	1	8 Studs and Nuts 100%	Three	100	Masoneilan 3IA58RGP

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	3-inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Pressurizer Power RV PCV-456 (7-26) [1.4-39]	S6-1195-3SPL+ V-8000C	VT-1	1	12 Studs 100%	Two	50	3GM58FN
		1-PCV-456	VT-1	1	8 Studs 100% and Nuts	Three	100	3IA58RGP
B7.70	2-inch Nom. Dia Charging Line Aux Spray (8-350,354) [1.4-40]	S6-51-2SPL		(30)				Copes-Vulcan
		V-8145	VT-1	1	6 Studs 100% and Nuts	One	50	2IA58RE
		S6-4532-2SPL V-8148	VT-1	1	6 Studs 100% and Nuts	Two	100	2IA58RE

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting							
	(2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	2-inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 1 Cold Leg	S6-958-2SPL						(Rockwell)
	Drain RCDT (7-218)	V-8057A	VT-1	1	2 Bolts 100%	One	13	Edwards 2T58
	[1.4-46]	V-8058A	VT-1	1	2 Bolts 100T and Nuts	One.	25	Edwards 2T58
	Loop 2 Cold Leg	S6-959-2SPL+						
	Drain RCDT (7-219)	V-8057B	VT-1	1	2 Bolts 100%	Two	38	Edwards 2T58
	[1.4-47]	V-8058B	VT-1	1	2 Bolts 100% and Nuts	Two	50	Edwards 2T58
	Loop 3 Cold Leg Drain RCDT	S6-960-2SPL+						
	[1.4-48] (7-214)	V-8057C	VT-1	1	2 Bolts 100%	Three	63	Edwards 2T58
		V-8058C	VT-1	1	2 Bolts 100% and Nuts	Three	75	Edwards 2T58
	Loop 4 Cold Leg	S6-961-2SPL+						
	Drain RCDT (7-215)	V-8057D	VT-1	1	2 Bolts 100%	Three	88	Edwards 2T58
	[1.4-49]	V-8058D	VT-1	1	2 Bolts 100% and Nuts	Three	100	Edwards 2T58

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	2-in. Nom. Diameter Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 1 Hot Leg RTD	S6-1139-2SPL						(Rockwell)
	Conn Hdr. (7-221)	V-8063A	VT-1	1	2 Bolts 100%	One	13	Edwards 2T58
	[1.4-56]	V-8067A	VT-1	1	2 Bolts 100% and Nuts	One	25	Edwards 2T58
	Loop 2 Hot Leg RTD	S6-1145-2SPL						
	Conn Hdr. (7-224)	V-8063B	VT-1	1	2 Bolts 100%	Two	38	Edwards 2T58
	[1.4-57]	V-8067B	VT-1	1	2 Bolts 100% and Nuts	Two	50	Edwards 2T58
	Loop 3 Hot Leg RTD	S6-1151-2SPL						
	Conn Hdr. (7-231)	V-8063C	VT-1	1	2 Bolts 100%	Three	63	Edwards 2T58
	[1.4-58]	V-8067C	VT-1	1	2 Bolts 100% and Nuts	Three	75	Edwards 2T58
	Loop 4 Hot Leg RTD	S6-1157-2SPL						
	Conn Hdr. (7-230)	V-8063D	VT-1	1	2 Bolts 100%	Three	88	Edwards 2T58
	[1.4-59]	V-8067D	VT-1	1	2 Bolts 100% and Nuts	Three	100	Edwards 2T58

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting							
	(2-inch Dia. and Less) Bolts, Studs and Nuts							
B7-70	2-in. Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 1 Cold Leg RTD	S6-1140-2SPL						(Rockwell)
	Conn (7-220)	V-8089A	VT-1	1	2 Bolts 100%	One	8	Edwards 2T58
	[1.4-60]	V-8088A	VT-1	1	2 Bolts 100%	One	17	Edwards 2T58
		V-8075A	VT-1	1	2 Bolts and Nuts 100T	One	25	Edwards 2T58
	Loop 2 Cold Leg RTD	S6-1146-2SPL						
	Conn (7-222)	V-8089B	VT-1	1	2 Bolts 100%	Two	33	Edwards 2T58
	[1.4-61]	V-8088B	VT-1	1	2 Bolts 100%	Two	42	Edwards 2T58
		V-8075B	VT-1	1	2 Bolts and Nuts 100T	Two	50	Edwards 2T58
	Loop 3 Cold Leg RTD	S6-1152-2SPL						
	Conn (7-236)	V-8089C	VT-1	1	2 Bolts 100%	Three	58	Edwards 2T58
	[1.4-62]	V-8088C	VT-1	1	2 Bolts 100%	Three	67	Edwards 2T58
		V-8075C	VT-1	1	2 Bolts and Nuts 100T	Three	75	Edwards 2T58

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs and Nuts							
B7.70	2-in. Nom. Diameter Cont'd	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Loop 4 Cold Leg RTD Conn (7-234) [1.4-63]	S6-1159-2SPL						(Rockwell)
		V-8089D	VT-1	1	2 Bolts 100%	Three	83	Edwards 2T58
		V-8088D	VT-1	1	2 Bolts 100%	Three	92	Edwards 2T58
		V-8075D	VT-1	1	2 Bolts 100% and Nuts	Three	100	Edwards 2T58

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MAJOR ITEM: VALVES (B-G-2)
TABLE: 1.6
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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
	VALVES - Cont'd							
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs, and Nuts							
B7.70	1.5-Inch Nom Diameter	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Boron Inj Tk Out Loop1 Cold Leg (9-212) (9-240) (9-231) [1.4-64]	S6-1991-1.5 V-8810A	VT-1	(4) 1	2 Bolts 100% and Nuts	One	25	(Rockwell) Edwards 1.5T58
	Boron Inj Tk Out Loop2 Cold Leg (9-210) (9-228) [1.4-67]	S6-1992-1.5 V-8810B	VT-1	1	.2 Bolts 100% and Nuts	Two	50	Edwards 1.5T58
	Boron Inj Tk Out Loop3 Cold Leg (9-209) (9-240) [1.4-70]	S6-1993-1.5 V-8810C	VT-1	1	2 Bolts 100% and Nuts	Three	75	Edwards 1.5T58
	Boron Inj Tk Out Loop4 Cold Leg (9-212) (9-240) [1.4-64]	S6-1994-1.5 V-8810D	VT-1	1	2 Bolts 100% and Nuts	Three	100	Edwards 1.5T58

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MAJOR ITEM: VALVE SUPPORTS (B-K-1)(B-K-2)
TABLE: 1.6
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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
	VALVES - Continued							
B-K-1	Support Members							
B10.30	Integrally Welded Attachments (To Pressure Boundary	(Attach't)	-	-	-	-	-	B10.30 Not Applicable- No Welded Attachments to Valves
B-K-2	Support Components							
B11.30	Component Supports	(Supports)	-	-	Note Comments on Page ii in Tab Section 1.4	-	-	Included in Tab Section 1.4, Scheduled with Pipe Supports.

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MAJOR ITEM: VALVE BODIES (B-M-1)(B-M-2)
TABLE: 1.6
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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
	VALVES - Continued							[*] ISI DWG. Page No.
B-M-1	Pressure Retaining Welds							
B12.30	Valve Body Welds 4 In. or Less Nom.Dia.	-	-	-	-			B12.30 Items not applicable. Reference fig. IWB-2500-17
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, tab section 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-Exceeding 4 in. nom. diameter (Internal Surfaces)	Line No. Valve No.			Valve Interior	(†)		Manufacturer & Style
	Loop 4 Hot Leg Before V-8701 (10-11) [1.4-7]*	S6-1665-14SPL V-8701	VT-1	1	1 Valve (surface)	Three	100	Copes-Vulcan GM-48SEZ Containment Isol
	Accumulator Injection (9-16,17)Loop1[1.4-8]	S6-253-10SPL V-8956A	VT-1	1	1 Valve (surface)	Three	100	Darling, 10C48Z Check Valve

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MAJOR ITEM: VALVES (B-M-2)
TABLE: 1.6
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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
	Valves - Cont'd							(†) See Pg. 16 of 17
B-M-2	Pressure Retaining Welds							
B12.40	Valve Body Interior, Cont'd	Line No. Valve No.			Valve Interior	(†)		Manufacturer & Style
	Safety Inj Loop 1 HotLeg (10-16) [1.4-13]	S6-235-6SPL+ V-8949A	VT-1	1	1 Valve (Surface)	Three	100	Velan 6C58 Check Valve
	Pressurizer RV-8010B (7-28) Inlet [1.4-22]	S6-728-6SPL RV-8010B	VT-1	1	1 Valve (Surface)	Three	100	Crosby 6RV58 Relief Valve

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STM GEN)
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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
C-A	STEAM GENERATORS Pressure Retaining Welds	DWG. REF. DC-663206-37 *[2.1-1]						[*] ISI DWG. Page No.
					Exam'n Area meets or exceeds req'ts of Fig. IWC-2520-1 (C1.10/C1.20) and IWC-2520-2 (C1.30)			Welds 1-3,2-4,3-5,and 4-7 have removable insulation windows to expose 20% of weld as required by S-75 Section XI, see relief request #007.
	WELDS	GIRTH WELDS						
C1.10 C1.20 C1.30	Shell Circumferential Head Circumferential Tube Sheet to Shell			(5)				
C1.30	Steam Generator 1-1 (Serial No. 1041)	Girth W1-2	UT	1	Tube Sheet 100% (to) Stub Barrel (36')	One	20	T=3.25/5.16" C=36' (circ.)
C1.10	Steam Generator 1-1 (Serial No. 1041)	Girth W1-3 Loop 1	UT	1	Stub Barrel 20% (to) Lower Shell (7.2')	One	20	T=3.25"/2.82" C=36' (circ.)
C1.10	Steam Generator 1-2 (Serial No. 1042)	Girth W2-4 Loop 2	UT	1	Shell Barrel 20% (to) Transition (7.2') cone	Two	50	T=2.82"/3.68" C=36' (circ.)

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STM GEN)
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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
	STEAM GENERATORS (continued)							
C-A	Pressure Retaining Welds - Cont'd							
C1.10	Steam Generator 1-3 (Serial No. 1043)	Girth W3-5 Loop 3	UT	1	Transition Cone 20% (to) (9.2') Upper Barrel	Three	75	T-3.68"/3.62" C=46' (circ.)
C1.20	Steam Generator 1-4 (Serial No. 1044)	Girth W4-7 Loop 4	UT	1	Upper Barrel 20% (to) Upper Head (9.2')	Three	100	T=3.62"/3.62" C=46' (circ.)

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STM GEN)
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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
	STEAM GENERATORS (continued)							
C-B	Pressure Retaining Nozzle Welds							
	(pipe diameter over 4")				Exam'n area meets or exceeds req'ts of fig. IWC-2520-3 (and) IWC-2520-4 as applicable.			[*] ISI DWG. Page No.'s
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 page (i) of 30, discussion in Tab 2.2.

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STM GEN)
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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
	STEAM GENERATORS (continued)							
C-B	Pressure Retaining Nozzle Welds							
C2.20	Nozzles in vessels >1/2" nominal thickness							NOTE: SUR/VOL performed on weld joint when scheduled - VOL performed on inner radius section (Fig. IWC-2520-4) to extent possible.
C2.21	Nozzle to Shell (Head)							
C2.22	Inner Radius							
				(4)				
	STEAM GENERATOR 1-3	Nozzle Weld	PT or MT	1	1 (see note)	Two	25	T=3.6"/D=16"
C2.21	Feedwater Lead 3 Nozzle Weld	(to) Shell at	UT					Weld 3-10 [2.2-27]
C2.22	Inner Radius [2.1-1]	K16-557-16IV	UT	1	1 (see note)	Two		
C.21	STEAM GENERATOR 1-4 Main Steam Lead 4 Nozzle Weld	Nozzle Weld (to) Shell at	PT or MT UT	1	1 (see note)	Three	25	T=3.6"/D-28" Weld 4-8 [2.2-24]
C2.22	Inner Radius [2.1-1]	K15-225-28V	UT	1	1 (see note)	Three	25	Upper Head Nozzle
C-C	Integrally Welded Support Attachments (To Pressure Vessel)							
C3.10	Integrally Welded Supports	(Attach't)	-	-	-	-	-	C3.10 Items not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STM GEN)
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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
	STEAM GENERATORS (continued)							
C-E	Support Members			(4)				
C3.20	Support Components Steam Gen. 1-2	Snubber Attachments	VT-3	4	1 Snubber Mount and 2 Attachment Areas 100%	One Two Three	25 50 100	Examinations on one vessel per IWC-2500-1 Footnote 2.
C3.30	Mechanical and Hydraulic Snubbers			(16)				
	Steam Generator 1-1 [2.1-1]	Hydraulic Snubbers #1 - #4	VT-4	4	4 Snub's 100%	One	25	
	Steam Generator 1-2 [2.1-1]	Hydraulic Snubbers #1 - #4	VT-4	4	4 Snub's 100%	Two	50	
	Steam Generator 1-3 [2.1-1]	Hydraulic Snubbers #1 - #4	VT-4	4	4 Snub's 100%	Three	75	
	Steam Generator 1-4 [2.1-1]	Hydraulic Snubbers #1 - #4	VT-4	4	4 Snub's 100%	Three	100	
C-D	Pressure Retaining Bolting Greater Than 2 In. Diameter.							
C4.10	Bolts and Studs	Remarks	-	-	-	-		C4.10 Item Not applicable

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MAJOR ITEM: PRESSURE VESSELS
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.						Struthers Wells Corp.
C-A	Pressure Retaining Welds in Vessels	DC-663216-454 *[2.1-2]						[*] ISI DWG. Page No.
								Relief #.007
	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		(2)			(1)	
C1.20	Boron Injection Tank 1-1 (Ser. Number 2-70-07-30717-4)	Girth W-A (Top Head)	UT	1	Top Head (to) Shell 20% (36")	Two	20	T=2.0"/4.15" 14.75' (circ.)
C1.20		Girth W-B (Bot Head)	UT	1	Bot Head (to) Shell 20% (36")	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 [2.2-19][2.1-2]	Bottom Head to Nozzle Weld Weld #N-B	PT or MT UT	1	1	One	100	

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MAJOR ITEM: PRESSURE VESSELS
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 -Cont'd							
C-C	Support Members							
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)				CW. View DN from Manway			Support Leg T=.618/.350
C-E	Support Components	(Attach't)		(4)				
C3.20	Support Leg [2.1-2]	Leg-A	PT or MT VT-3	1	1 Leg 100% and support	One	25 25	(To Vessel) (To Deck)
	Support Leg [2.1-2]	Leg-B	PT or MT VT-3	1	1 Leg 100% and support	Two	50 50	
	Support Leg [2.1-2]	Leg-C	PT or MT VT-3	1	1 Leg 100% and support	Three	75 75	
	Support Leg [2.1-2]	Leg-D	PT or MT VT-3	1	1 Leg 100% and support	Three	100 100	
C3.30	SUPPORTS, MECHANICAL AND HYDRAULIC SNUBBERS	Remarks	-	-	- Exam area meets Fig IWC-2520-6 Reqt's			C3.30 Item not Applicable
C-D	PRESSURE RETAINING BOLTING (Larger than 2" dia.)			(16)				
C4.10	Bolts, Studs and Nuts	Manway Bolting	UT UT UT	5 5 6	5 Studs 100% 5 Studs 100% 6 Studs 100%	One Two Three	30 60 100	
	END OF B.I.T.							

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (FILTERS)
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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
C-A	SEAL INJECTION FILTERS Press. Retaining Welds	DWG. REF. DC-663200-42 DC-663200-19 *[2.1-3]						[*] ISI DWG. Page No. (Commercial Filters Corp)
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet To Shell							C1.30 Item not applicable
C1.10	Seal Injection Filter 1-1 (Ser. # 17392-1548)	Girth Welds Girth W-A Shell-Flange	-	(2) 1	Flange (to) Shell	-	-	Relief 006
C1.20	Seal Injection Filter 1-2 (Ser. # 17392-1549)	Girth W-B (Bot Head)	-	1	Bot Head (to) Shell	-	-	Relief 006
C-B	NOZZLES IN VESSELS	[2.1-3]						
C2.10	≤1/2" Nomin. Thickness	Remarks	-	-	-	-	-	C2.10 & C2.20 Items not Applicable
	>1/2" Nomin. Thickness	Remarks	-	-	-	-	-	
C-C	Support Members							
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)	[2.1-3] Remarks	-	-	-	-	-	C3.10 Item Not Applicable IWC-2500-1,C-C footnote (1)

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (FILTERS)
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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
	SEAL INJECTION FILTERS - Cont'd							
C-E	Support Members	*[2.1-3]						
C3.20	Support Components	-	-	-	-	-	-	C3.20 Not Req'd IWC-2500-1(4)
C3.30	Supports Mechanical and Hydraulic Snubbers	-	-	-	-	-	-	C3.30 Item Not Applicable
C-D	PRESSURE RETAINING BOLTING (Larger than 2" dia.)							
C4.10	Bolts, Studs and Nuts	-	-	-	-	-	-	C4.10 Item Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (EX.LTD.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
	EXCESS LETDOWN HEAT EXCHANGER	DWG. REF. DC-663200-60 *[2.1-4]						[*]ISI DWG. Page No.
C-A	Pressure Retaining Welds in Vessels							
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet To Shell							C1.30 Item Not Applicable
		GIRTH WELDS		(2)				
C1.10	Excess Letdown Heat Exchanger 1-1	Girth Weld GA (Flange)	UT	1	Bot Flg (to) Shell As Access	One	50	Atlas S/N 853 Relief 006
C1.20	Excess Letdown Heat Exchanger 1-1	Girth Weld GB (Bot Head)	UT	1	Bot Flg (to) Shell As Access	Two	100	Relief 006
C-B	NOZZLES IN VESSELS							
C2.10	<1/2" Nom. Thickness	-	-	-	-	-	-	C2.10 & C2.20
C2.20	>1/2" Nom. Thickness	-	-	-	-	-	-	Items Not Applicable
C-C	Support Members	Attach't welds		(2)				
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)	Leg A	PT	1	Attach't (to) Shell 100%	Two	100	IWC-1220 (c)
		Leg B	PT	1				

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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
	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-C	SUPPORT MEMBERS							
C3.30	Mechanical and Hydraulic Snubbers	-	-	-	-	-	-	C3.30 Item Not Applicable
C-D	PRESSURE RETAINING BOLTING (Larger than 2" dia.)							
C4.10	Bolts, Studs and Nuts	-	-	-	-	-	-	C4.10 Item Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE 2.1 (REG.HT.EXCH.)
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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 EXCHANGERS	DWG. REF. DC-663200-60 *[2.1-5]						[*] ISI DWG. Page No. Serial #1831-3I, 1831-3II, 1831-3III Joseph Oat & Sons
C-A	Pressure Retaining Welds in Vessels							
	WELDS							
C1.10	Shell Circumferential							Regenerative Heat Exch's Shell 1 and 2 Not Examined IWC-2500-1 Footnote (3)
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 011
C1.20	Shell No. 3 Head-To-Shell Welds	Girth Weld GA (9)	PT[+]	(2) 1	Head (to) Shell As Access.	One	25	T=.756"/.900" 2.5' (circ.) Relief 006
		Girth Weld GD (12)	PT	1	Head (to) Shell As Access.	Two	50	T=.756"/.938" 2.5' (circ.) Relief 006
C1.30	Shell No. 3 Tube Sheet To Shell Welds	Girth Weld GB (10)	PT	(2) 1	Shell (to) Sheet As Access.	Three	75	T=.900"/.938" 2.5' (circ.) Relief 006
		Girth Weld GC (11)	PT	1	Sheet (to) Shell As Access.	Three	100	T=.938"/.756" 2.5' (circ) Relief 006

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MAJOR ITEM: PRESSURE VESSELS
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)	[2.1-5]						
C-B	NOZZLES IN VESSELS							
C2.10	<1/2" Nom. Thickness	-	-	-	-	-	-	C2.10 and C2.20 Items Not Applicable IWC-1220(c)
	>1/2" Nom. Thickness	-	-	-	-	-	-	
C-C	Support Members							
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)	-	-	-	-	-	-	C3.20 Item Not Req'd IWC-2500-1 Footnote (1)
C-E	SUPPORT COMPONENTS							
C3.20	Support Components	-	-	-	-	-	-	C3.20 Item Not Req'd IWC-2500-1 Footnote (4)
C3.30	SUPPORTS Mechanical and Hydraulic Snubbers	-	-	-	-	-	-	C3.30 Item Not Applicable
C-D	PRESSURE RETAINING BOLTING >2" Dia.							
C4.10	Bolts, Studs and Nuts	-	-	-	-	-	-	C4.10 Item Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
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-663200-60 *[2.1-6]						[*] ISI DWG. Page No. (Engineers & Fabricators Company)
C-A	Pressure Retaining Welds In Vessels							
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet To Shell							C1.30 N/A
		GIRTH WELDS		(2)				
C1.10	RHR Exchanger 1-1 (Ser. #15588-A)	Girth W-GA Weld #1	UT	1	Flg As Access. (to) Shell	Two	50	Relief 006
C1.20	RHR Exchanger 1-2 (Ser. #15588-B)	Girth W-GD Weld #4	UT	1	Bot Head (to) Shell	Three	100	Relief 006
C-B	NOZZLES IN VESSELS							
C2.10	<1/2" Nominal Thickness	-	-	-	-	-	-	C2.10 Items Not Applicable
C2.20	NOZZLES IN VESSELS >1/2" Nom. Thickness			(2)				
C2.20	RHR Exchanger 1-1 [2.2-3][2.1-6]	Nozzle Weld #1	PT	1	1	Two	50	At S1-112-8 (Inlet) (Relief 006)
	RHR Exchanger 1-2 [1.2-14][2.1-6]	Nozzle Weld #2	PT	1	1	Three	100	At S1-119-8 (Outlet) (Relief 006)

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MAJOR ITEM: PRESSURE VESSELS
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
	RHR HEAT EXCHANGERS -Cont'd	[2.1-6]						
C-C C3.10	Support Members Integrally Welded Support Attachments (To Pressure Vessels)	(Attach't)						Support Legs
C-C C3.10 C-E C3.20	RHR Exchanger 1-1 [2.1-6] (Support Components) 1-1	Leg - A	PT	(4) 1	1 Leg 100% (and)	Two	50	
		Leg - A+B	VT-3	2	2 Supports	Two	50	(Exposed Areas)
C-C C3.10 C-E C3.20	RHR Exchanger 1-2 [2.1-6] (Support Components) 1-2 Supports	Leg - B	PT	1	1 Leg 100% (and)	Three	100	
		Leg - A+B	VT-3	2	2 Supports	Three	100	(Exposed Areas)
C3.30	Mechanical and Hydraulic Snubbers	-	-	-	-	-	-	C3.30 Item Not Applicable
C-D	Pressure Retaining Bolting (Larger than 2" dia.)							
C4.10	Bolts, Studs and Nuts	-	-	-	-	-	-	C4.10 Item Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STAB.SEP'R)
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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
	STABILIZER SEPARATOR @ Recip. Chg. Pp. 1-3	DWG REF DC-663210-180-1						General Atomic S/N E609
WELDS								
C-A	Pressure Retaining Welds in Vessels							
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 006
	Bottom Head-To-Shell	Weld G-B	UT	1	360° As Accessible	Three	100	Relief 006
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		-	-	-	-	-	Not Req'd
C3.10	Integrally Welded Supports	-	-	-	-	-	-	IWC-2500-1 Footnote 1
C3.20	Component Supports	Support Skirt	VT-3	1	100%	Three	100	
C3.30	Supports-Mech'l & Hydraulic Snubbers	-	-	-	-	-	-	C3.20 Item Not Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (STAB. SEP'R)
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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
	STABILIZER SEPARATOR Cont'd							
C-D	PRESSURE RETAINING BOLTING (>2" Dia.)							
C4.10	Bolts, Studs and Nuts	-	-	-	-	-	-	C4.10 Item Not Applicable

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MAJOR ITEM: PRESSURE VESSELS
TABLE: 2.1 (LIQ. PULS. DAMP)
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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
	LIQUID PULSATION DAMPENER @ Recip. Ch. Pp 1-3	DWG REF DC-663210-181-1						(Gen. Atomic)
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

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MAJOR ITEM: PIPING SYSTEM WELDS
TABLE: 2.2
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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] 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 005.

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-008. Any inaccessible portions will be fully documented and the remaining weld area examined to the fullest extent possible.

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

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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 & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING								
	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 PAGE (i) OF 30 DISCUSSION, THIS TAB SECTION [*] ISI DWG. Page No.'s
C-F C5.20	PRESSURE RETAINING WELDS IN PIPING Piping Welds Over 1/2" Nom. Wall Thickness				[1]Addenda S-75 Req'd Percent Over 40 Year Service Life [2]S-75 Addenda Percent To Date Over 10 Year Interval				(**) Construction Dwg. Page No.'s
C5.21	Circumferential Welds Single Stream Systems	Butt Welds Category C-F		(5)			[1](100%)		T=1.312"
	RHR Injection To Hot Leg 1 & 2 (10-16)**	S6-120-12 *[2.2-4]	PT UT	1	1	0	-	[2]0	
	Cent. Charg. Pps Disch. Hdr (8-1)	S6-1454-6 [2.2-10]	PT UT	4	4	1	Two	25	T=.719"
	END SINGLE STREAM, C-F								

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MAJOR ITEM: PIPING-CIRCUM. WELDS (C-F)(C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & 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								
C5.20 C5.21	Piping Welds >½"Wall Multiple Stream Systems	Butt Welds Category C-F		(4)	(2)	(1)		[1](100%)	[1]Of One Stream, Composite T=.812"
	SIS To RCS Hot Leg Loop 1 (10-16)	S6-2575-8 [2.2-4]	PT UT	1	1	-	-	-	
	SIS to RCS Hot Leg Loop 2 (10-16) End M/S Systems C-F	S6-2576-8 [2.2-4]	PT UT	3	1	1	Three	50	
C-G	Pressure Retaining Welds in Piping								
C5.21	Single Stream System	Butt Welds Category C-G		(22)				(50%)	T=.719"
	Charging Pumps Disch. Emerg. (8-1) (9-6)	S6-1973-6 [2.2-10]	PT UT	6	3	1	Three	33	
								(50%)	T=.719"
	Boron Injection Tank Inlet (9-6)	S6-2032-6III [2.2-19]	PT UT	16	8	2(1) (1)	One Two	13 25	Safe Ends, Bot & Top of Boron Tank Included
	END SINGLE STREAM, 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 & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - continued								[1]Of One Stream, Composite
C-F	Pressure Retaining Welds in Piping - Cont'd								
C5.20	Piping Welds >½" thick	Butt Welds							
C5.21	Multiple Stream Systems	Category C-G		(48)	(6)	(2)		[1](50%)	T=1.002"
	Steam Gen Steam Outlet 1-1 (500136)	K15-228-28V [2.2-21] Lead 1	PT/MT UT	12	1	1	One	8	2 Welds Encap.
	Steam Gen Steam Outlet 1-2 (500137)	K15-227-28V [2.2-22] Lead 2	PT/MT UT	12	1	-	-	8	2 Welds Encap.
	Steam Gen Steam Outlet 1-3 (500138)	K15-226-28V [2.2-23] Lead 3	PT/MT UT	12	2	-	-	8	
	Steam Gen Steam Outlet 1-4 (500139)	K15-225-28V [2.2-24] Lead 4	PT/MT UT	12	2	1	Three	17	
				(10)	(2)	(1)		(50%)	T=.968
C5.21	Main Steam Relief Vlv. Hdr. (500138)(4-59)	K15-1065-24V [2.2-23] Lead 3	PT/MT UT	4	1	-	-	-	
	Main Steam Relief Vlv. Hdr. (500139)(4-60)	K15-1066-24V [2.2-24] Lead 4	PT/MT UT	6	1	1	Three	25	2 Welds Encap.

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MAJOR ITEM: PIPING-CIRCUM. WELDS (C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Continued								
C-G	Pressure Retaining Welds in Piping - Cont'd								
C5.20 C5.21	Piping Welds >½" thick Multiple Streams, Continued Cat. C-G	Butt Welds		(70)	(8)	(2)		(50%)	T=.843"
	Stm Gen Feed Wtr Supply Gen 1-1 (500146)	K16-554-16V Lead 1 [2.2-25]	PT/MT UT	17	2	1	One	6	2 Welds Encap.
	Steam Gen Feed Wtr Supply Gen 1-2 (500146)	K16-555-16V Lead 2 [2.2-26]	PT/MT UT	17	2	-	-	6	2 Welds Encap.
	Steam Gen Feed Wtr Supply Gen 1-3 (500146)	K16-557-16V Lead 3 [2.2-27]	PT/MT UT	18	2	-	-	6	2 Welds Encap.
	Steam Gen Feed Wtr Supply Gen 1-4 (500146)	K16-556-16V Lead 4 [2.2-28]	PT/MT UT	18	2	1	Three	12	2 Welds Encap.

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MAJOR ITEM: PIPING-CIRCUM. WELDS (C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Continued								
C-G	Pressure Retaining Welds in Piping								
C5.20	Piping Welds >½" Thick	Butt Welds							
	Multiple Streams, Continued Cat.C-G			(20)	(5)	(1)		(50%)	T=.812"
C5.21	RHR Pp Inj Cold Leg Pp 1-1 (9-38) (9-39) (9-40)	S6-508-8III [2.2-30] [2.2-31] [2.2-32]	PT UT	11	3	1	One	10	
	RHR Pp Inj Cold Leg Pp 1-2 (9-41)	S6-509-8III [2.2-33]	PT UT	9	2	-	-	10	
				(12)	(3)	(1)		(50%)	T=.718"
C5.21	RHR Pp 1-1 Inj Cold Leg Loop 1 (9-36)	S6-3844-6III [2.2-34]	PT UT	4	1	-	-	-	
	RHR Pp 1-1 Inj Cold Leg Loop 2 (9-37)	S6-3846-6III [2.2-35]	PT UT	4	1	-	-	-	
	RHR Pp 1-2 Inj Cold Leg Loop 3 (9-43)	S6-3846-6III [2.2-33]	-	1	-	-	-	-	
	RHR Pp 1-2 Inj Cold Leg Loop 4 (9-42)	S6-3847-6III [2.2-36]	PT UT	3	1	1	One	17	
	END OF ITEM C5.21								

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MAJOR ITEM: PIPING-LONGIT. WELD (C-F)(C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & 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 figure IWC-2520-7				
C-F C5.22	Pressure Retaining Welds In Piping Longitudinal Welds Over 1/2 In. Wall	Long'l Seams							C5.22 Item Cat'y C-F S/S Not Applicable
	Single Stream Systems Category C-F		-		-	-	-	-	
	Multiple Stream Systems Cat. 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 Cat. C-G			(36)	(4)	(1)		[1](50%)	[1]Of One Stream, Composite
	Steam Gen Steam Outlet 1-1 (500136)	K15-228-28V [2.2-21] Lead 1	PT or MT UT	10	-	-	-	-	T=1.002" 2 Welds Encap.
	Steam Gen Steam Outlet 1-2 (500137)	K15-227-28V [2.2-22] Lead 2	PT or MT UT	10	2	-	-	-	2 Welds Encap.

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MAJOR ITEM: PIPING-LONGIT. WELD (C-F)(C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - CONT'D.								
C5.22	Long'l Welds Cont'd. (Cat. C-G MS)								
	Steam Gen Steam Outlet 1-3 (500138)	K15-226-28V [2.2-23] Lead 3	PT or MT UT	8	-	-	-	-	
	Steam Gen Steam Outlet 1-4 (500139)	K15-225-28V [2.2-24] Lead 4	PT or MT	8	2	1	Three	12	
C5.30	Pipe Branch Connection	Branch Welds	-	-	-	-	-	-	C5.31 or C5.32 Items Cat'y C-F or C-G SS. or MS, not applicable - No branch connection welds
C5.31	Circumferential Welds	Category C-F							
C5.32	Longitudinal Welds	Category C-G							
	Single and Multiple Str. Sys.								

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING-CIRCUM. WELDS (C-F)
TABLE: 2.2 (C5.10)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & 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				Exam'n area meets or exceeds req'ts of fig. IWC-2520-7				
C5.10	Piping Welds 1/2" or Less Nominal Wall Thickness								
C5.11	Circumferential Welds Single Stream Systems Category C-F	Butt Welds		(87)	(83)	(25)		(100%)	
C5.11	Loop 4 Hot Leg To RHR Pps (10-10)	S1-927-14III [2.2-1]	PT	10	10	3(1)	One	10	
	(10-11)	[2.2-2]				(1)	Two	20	
						(1)	Three	30	
	Res Ht Exchanger 2 Outlet (9-2)	S1-3551-14III [2.2-3]	PT	2	2	1(1)	Three	33 (100%)	
	RHR Injection TO Hot Leg 1 & 2 (10-16)	S1-985-12IIIP [2.2-4]	PT	20	20	5(2)	One	10	
	(10-15)	[2.2-5]				(2)	Two	20	
	(10-14)	[2.2-6]				(1)	Three	25	
	(10-19)	[2.2-7]						(100%)	
	Cent Charg Pps Suct Header (8-20)	S2-1456-8 [2.2-8]	PT	2	2	1(1)	One	50	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING-CIRCUM. WELDS (C-F)
TABLE: 2.2

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & 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								
C5.10	Piping Welds ≤ ½" Thick								
C5.11	Single Stream Systems								
	Category C-F	Butt Welds						(100%)	
	RHR Exchs Bypass Cross-Tie (10-2)	S1-1663-8III [2.2-9]	PT	18	14	4(2) (1) (1)	One Two Three	08 17 25	4 Welds Not Accessible-Wall Penetration
	Residual Ht Exchs Bypass Hdr (10-2)	S1-1661-8III [2.2-9]	PT	19	19	5(1) (2) (2)	One Two Three	(100%) 05 16 26	
	RHR Exchs Outlet Cross-Tie Hx 1-2 (10-19)	S1-1669-8 [2.2-7]	PT	11	11	3(1) (1) (1)	One Two Three	(100%) 08 17 25	
	RHR Exchs Outlet Cross Tie Hx 1-1 (10-13)	S1-2458-8 [2.2-13]	PT	5	5	2(1) (1)	One Two	(100%) 20 40	
	END S/S SYSTEM - C-F								

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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 & 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	Butt Welds							
C5.10	Piping Welds ≤ ½" Thick								
C5.11	Multiple Stream Systems Category C-F			(32)	(16)	(4)		[1](100%)	[1]Of One Stream Composite
	Residual Ht Rem Pp1-1 Suction (10-10)	S1-110-14III [2.2-2]	PT	14	8	2(1)	One	06	
	(10-9)	[2.2-11]				(1)	Two	12	
	Residual Ht Rem Pp1-2 Suction (10-10)	S1-111-14IIIP [2.2-2]	PT	18	8	2(1)	One	18	
	(10-8)	[2.2-12]				(1)	Two	24	
				(32)	(16)	(4)		(100%)	
C5.11	Residual Ht Rem Pp1-1 Disch (10-2)	S1-112-8III [2.2-9]	PT	16	8	2(1)	One	06	
						(1)	Three	19	
	Residual Ht Rem Pp1-2 Disch (10-2)	S1-113-8III [2.2-9]	PT	16	8	2(1)	Two	13	
						(1)	Three	25	
				(27)	(14)	(4)		(100%)	
C5.11	Residual Ht Exchanger 1-1 Outlet (9-2) (10-13) Hx to Line 2458	S1-118-8III[2] [2.2-3] [2.2-13]	PT	13	7	2(1)	One	07	
						(1)	Three	20	
	Residual Ht Exchanger 1-2 Outlet (10-4) Hx to Line 1669	S1-119-8III[2] [2.2-14]	PT	14	7	2(1)	Two	13	[2]See Category C-G, page 14 of 30 for balance of lines 118 and 119.
						(1)	Three	27	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING-CIRCUM. WELDS (C-F)(C-G)
TABLE: 2.2
PAGE 11 of 30

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & 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								
C5.10	Piping Welds ≤ ½" Thick Multiple Streams, Continued Cat. C-F	Butt Welds		(29)	(14)	(4)		(100%)	
C5.11	Cent Charg Pmp Suct Pmp 1-1 (8-21)	S2-42-6 [2.2-15]	PT	15	7	2(1) (1)	One Three	07 21	
	Cent Charg Pmp Suct Pmp 1-2 (8-20)	S2-43-6 [2.2-8]	PT	14	7	2(1) (1)	Two Three	14 29	
C-G	Pressure Retaining Welds Cont'd Single Stream Systems Category C-G	Butt Welds		(70)	(35)	(9)		(50%)	
C5.11	RWST To Res Ht Rem Pps Suct (10-10)	S1-223-12IIIP [2.2-2]	PT	1	1				
	Res Ht Rem To Charg Pps Suct (9-2)	S2-734-8III [2.2-3]	PT	5	3	1	One	33	
	RHR Hdr. to Chg. Pps. Suct. (9-2)	S1-1971-8III [2.2-3]	PT	7	3	1	Two	33	

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING-CIRCUM. WELDS (C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING-Continued								
C-G	Pressure Retaining Welds In Piping								
C5.10	Piping Welds ≤ ½" Thick Single Streams, Cont. Category C-G	Butt Welds						(50%)	
C5.11	RHR To SIS Pp1-2 (and) Cont Spr (10-5)	S1-735-8IIIP [2.2-16]	PT	9	4	1	One	25	
	RHR To Safety Injec. Pmp 1-2 (9-28)	S2-1984-8III [2.2-17]	PT	20	10	3(1) (1) (1)	One Two Three	10 20 30	
	Safety Inj Pumps Suc. Hdr (9-5)	S2-1986-8 [2.2-18]	PT	5	3	1	Two	33	
	Charg Pps Suction From RWST Vlv. B (9-11)	S2-1988-8 [2.2-29]	PT	5*	2	-	-	-	*Ref. Mult. Str.P.2.2-13 for balance of line-1988
	Residual Heat Rem. To RWST (10-19)	S1-2212-8III [2.2-7]	PT	3	2	-	-	-	
	X-Tie Chg Pp & SI Pp Suction (9-3)	S2-4296-6 [2.2-20]	PT	9	4	1	One	25	
	RHR To Safety Injec. Pump 1-1 (9-3)	S2-6 (6") [2.2-20]	PT	6	3	1	One	33	
	END S/S SYSTEMS C-G								

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MAJOR ITEM: PIPING-CIRCUM. WELDS (C-G)
TABLE: 2.2
PAGE 13 of 30

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - CONT'D								[1]Of One Stream,
C-G	Pressure Retaining Welds In Piping								
C5.10	Piping Welds ≤ ½" Thick	Butt Welds							Composite
C5.11	Multiple Stream Systems Cat. C-G			(24)	(3)	(1)		[1](50%)	Material "T" SCH 60=.406"
	Steam Gen MSRV Riser 1-1 (500136)	K15-228-8V [2.2-21]	PT or MT	6	0	-	-	-	28" Lead 1
	Steam Gen MSRV Riser 1-2 (500137)	K15-227-8V [2.2-22]	PT or MT	6	1	-	-	-	28" Lead 2
	Steam Gen 10% Atmos. Dump 1-3 (500138)	K15-226-8V [2.2-23]	PT or MT	6	1	1	Two	17%	24" Lead 3 Riser
	Steam Gen MSRV Riser 1-4 (500139)	K15-225-8V [2.2-24]	PT or MT	6	1	-	Two	-	24" Lead 4 Riser
				(20)	(5)	(1)		(50%)	
C5.11	Cont Sump To RHR Pps Pmp 1-1 Suct (10-9) (PDM) (500190)	S1-512-14IIIP *2749-14 [2.2-11]	PT	10	2	1	Two	10	
	Cont Sump To RHR Pps Pmp 1-2 Suct (10-8) (500190)	S1-513-14IIIP *2750-14 [2.2-12]	PT	10	3	-	-	10	
				(5)	(2)	(1)		(50%)	
C5.11	Charg. Pps Suction From RWST Vlv A 9-11	S2-1987-8 [2.2-29]	PT	3	1	-	-	-	
	Charg Pps Suc. From RWST Vlv.B (9-11)	S2-1988-8 [2.2-29]	PT	2	1	1	Two	25	Ref. Single Str. P.2.2-12

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MAJOR ITEM: PIPING-CIRCUM. WELDS (C-G)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Continued								
C-G	Pressure Retaining Welds In Piping								
C5.10	Piping Welds ≤ ½" Thick	Butt Welds							
C5.11	Multiple Streams, Cont. Category C-G			(14)	(4)	(1)		(50%)	
	RHR Sup To Spray Hdrs 1 & 3 (9-2)	S1-279-8III [2.2-3]	PT	6	2	1	One	13	
	RHR Sup To Spray Hdrs 2 & 4 (10-5)	S1-280-8III [2.2-16]	PT	8	2	-	-	13	
				(10)	(3)	(1)		(50%)	
C5.11	Residual Heat Exch'r. 1 Outlet (10-13) Line 2458 to V-8809A	S1-118-8III [2.2-13]	PT	4	1	-	-	-	
	Residual Heat Exch'r. 2 Outlet (9-41,42) Line 1669 to V-8809B	S1-119-8III [2.2-14]	PT	6	2	1	Two	17	See category C-F, p.10 of 30 for balance of lines 118 & 119
				(16)	(4)	(1)		(50%)	
C5.11	Safety Inj Pump Suc. Pump 1-1 (9-5)	S2-1982-6 [2.2-18]	PT	8	2	1	Two	13	
	Safety Inj Pump Suc. Pump 1-2 (9-5)	S2-1983-6 [2.2-18]	PT	8	2	-	-	-	
	END OF ITEM C5.11								

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING-LONGIT. WELDS (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Continued				Exam'n area meets or exceeds req'ts of fig. IWC-2520-7				NOTE PAGE i FOR REMARKS THIS TAB SECTION
C-F	Pressure Retaining Welds In Piping								
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
C5.12	Multiple Stream Systems Cat. C-F			(12)	(6)	(2)		[1](100%)	[1]Of One Stream Composite
	Residual Ht Rem Pp1-1 Suction (10-9)	S1-110-14III [2.2-11]	PT	6	2	-	-	-	
	Residual Ht Rem Pp1-2 Suction (10-8)	S1-111-14III [2.2-12]	PT	6 (4)	4 (2)	2 (-)	One	33 (100%)	
C5.12	Residual Ht Rem Pp1-1 Discharge (10-2)	S1-112-8III [2.2-9]	PT	2	2	-	-	-	
	Residual Ht Rem Pp1-2 Discharge (10-2)	S1-113-8III [2.2-9]	PT	2	-	-	-	-	
				(4)	(2)	(-)		(100%)	
C5.12	Residual Ht Exchanger 1-1 Outlet (9-2)	S1-118-8III [2.2-3]	-	2	-	-	-	-	
	Residual Ht Exchanger 1-2 Outlet (10-4)	S1-119-8III [2.2-14]	PT	2	2	-	-	-	
	(End Mult. Steam - C-F)								

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MAJOR ITEM: PIPING-LONGIT. WELDS (C-G)(C-D)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT & REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Continued								
C-G	Pressure Retaining Welds In Piping								
C5.10	Piping Welds ≤ ½" Thick	Long'l Welds							C5.12 Item Cat'y C-G S/S Not Applicable
C5.12	Single Stream Systems Category C-G		-	-	-	-	-	-	
C5.12	Multiple Stream Sys. Category C-G			(12)	(3)	(2)		[1](50%)	[1]Of One Stream Composite
C5.12	Cont Sump To RHR Pps Pump 1-1 Suct (10-9)	S1-512-14III [2.2-11]	PT	6	2	2	Two	50	
	Cont Sump to RHR Pps Pump 1-2 Suct (10-8)	S1-513-14III [2.2-12]	PT	6	1	-	-	50	
	(End of Mult Strm C-G)								
C-D	Pressure Retaining Bolting (Larger Than 2" Dia.)								Category C-D Item C4.20 Not Applicable (Welded Piping)
C4.20	Bolts, Studs and Nuts								

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MAJOR ITEM: PIPING - SUPPORTS
TABLE: 2.2
PAGE ii of 30

Category C-C welded support attachments to the pressure boundary (Items C3.40, C3.70, C3.100) are scheduled for surface examination when the base metal thickness of the welded attachment is 3/4" (.750) and greater (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, C3.110, C3.120) are scheduled together with the corresponding pipe (C3.40, C3.50, C3.60) system. Supports for pumps (C3.70, C3.80, C3.90) 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: Hanger section totals have been updated to reflect changes made during the Seismic Reverification Program.

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS				Exam'n Area meets or exceeds req'ts of fig. IWC-2520-5			This column identifies attach't number when applicable to footnote 1 of IWC-2500-1 category C-C
C-C	INTEGRALLY WELDED ATTACHMENTS (TO PRESSURE BOUNDARY)							
C3.40	Piping	(Attach't)						[1]Valve Items C3.100,C3.110 and C3.120 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 Comments on			Note: VT-4
C3.60	Piping, Mech. & Hyd.				page ii of 30			scheduled as
C3.80	Pumps (See Table 2.3)				this Tab.			applicable to
C3.90	Pumps (See Table 2.3)							individual
C3.110	Valves[1]							components
C3.120	Mech. and Hyd.							

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C,C-E	Support Members							
C3.40	Support Attach't							
C3.50	Support Components							
	(C-F) SINGLE STREAM							
		Line No. & ISI Dwg. No.	SYSTEM REFERENCE TO S-75 ONLY, NO BEARING ON SCHEDULED REQ'TS					Applicable to C-C only Seismic Constr Mark No. Weld No
C3.40	Loop 4 Hot Leg to RHR	S1-927-14III	PT	1	C-C	One	100	57S-20V/Param't
C3.50	Pps (10-11)	[2.2-1]	VT-3	9	C-E		C-E	
	(10-10)	[2.2-2]	(VT-4)		3 Supports 100%	One	33	
					3	Two	67	
					3	Three	100	
C3.40	RHR Injection to	S1-985-12IIIP	PT	1	C-C	One	100	40-46A/X219
C3.50	Hot Leg 1 & 2	[2.2-7]	VT-3	24	C-E		C-E	
	(10-19)	[2.2-6]	(VT-4)		8 Supports 100%	One	33	
	(10-14)	[2.2-5]			8	Two	66	
	(10-15)	[2.2-4]			8	Three	100	
	(10-16)	(S6-120-12)						
C3.40	Cent Charg Pps	S1-1456-8	-	-		-	-	No Supports
C3.50	Suct Header (8-20)	[2.2-8]	-	-		-	-	In Boundary
C3.40	RHR Exchs Bypass	S1-1663-8III	PT	1	C-C	Two	100	72-1A/X190A-B
C3.50	Cross-Tie (10-2)	[2.2-9]	VT-3	9	C-E		C-E	
					3 Supports 100%	One	33	
			(VT-4)		3	Two	66	
					3	Three	100	

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MAJOR ITEM: PIPING - SUPPORTS (C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS Cont'd							
C-C,C-E	Support Members(cont'd)							C-C
C3.40	Support Attach't							Applicable
C3.50	Support Components							Mark Weld
	+(C-F) Single Stream, Cont'd	Line No. & ISI DWG. No.						
C3.40	Residual Ht Exchs	S1-1661-8III	PT	2	C-C	Two	100	74-32R/X13A-H
C3.50	Bypass Hdr (10-2)	[2.2-9]	VT-3	18	C-E		C-E	74-29A/X217A,B
			(VT-4)		6 Supports 100%	One	33	
					6	Two	67	
					6	Three	100	
C3.40	Cent Charg Pps	S6-1454-6	PT	2	C-C	One	100	73-36R/LUGS
C3.50	Disch Hdr. (8-1)	[2.2-10]	VT-3	6	C-E		C-E	4-49SL/X817A-H
			(VT-4)		2 Support 100%	One	33	
					2	Two	67	
	+(C-F) Multiple Stream				2	Three	100	
C3.40	Residual Ht Rem Pp 1-1 Suction	S1-110-14IIIP	VT-3	7	C-E		C-E	
C3.50	(10-10) (10-9)	[2.2-2]	(VT-4)		2 Supports 100%	One	29	
					2	Two	57	
					3	Three	100	
	Residual Ht Rem Pp 1-2 Suction (10-10) (10-8)	S1-111-14IIIP [2.2-2] [2.2-12]	VT-3 (VT-4)	8	C-E		C-E	
					3 Supports 100%	One	37	
					3	Two	75	
					2	Three	100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C, C-E	Support Members (Cont'd)							
C3.40	Support Attach't							
C3.50	Support Components							
	+(C-F) Multiple Stream (cont'd)	Line No. & ISI DWG. NO.						
C3.40	Residual Ht Rem Pp 1-1 Discharge	S1-112-8III	VT-3					
C3.50	(10-2)	[2.2-9]	(VT-4)	5	C-E 1 Support 100% 2 2	 One Two Three	C-E 20 60 100	
	Residual Ht Rem Pp 1-2 Discharge (10-2)	S1-113-8III [2.2-9]	VT-3 (VT-4)	3	C-E 1 Support 100% 1 1	 One Two Three	C-E 33 67 100	
C3.40	Residual Ht Exchanger 1-1 Outlet	S1-118-8III						
C3.50	(9-2) (10-13)	[2.2-3] [2.2-13]	VT-3 VT-4	15	C-E 5 Supports 100% 5 5	 One Two Three	C-E 33 67 100	
	Residual Ht Exchanger 1-2 Outlet (10-4)	S1-119-8III [2.2-14]	VT-3 (VT-4)	15	C-E 5 Supports 100% 5 5	 One Two Three	C-E 33 67 100	

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C,C-E	Support Members Cont'd							
C3.40	Support Attach't							
C3.50	Support Component							
	+(C-F) Multiple Stream Cont'd	Line No. & ISI DWG. NO.						
C3.40	RHR Exchs Outlet HX 1-1 Cross Tie	S1-2458-8III						
C3.50	(10-13)	[2.2-13]	VT-3 (VT-4)	3	C-E 1 Support 100% 1 1	 One Two Three	C-E 33 67 100	
	RHR Exchs Outlet HX 1-2 Cross-Tie	S1-1669-8III						
	(10-19)	[2.2-7]	VT-3 (VT-4)	8	C-E 3 Supports 100% 3 2	 One Two Three	C-E 38 75 100	
C3.40	SIS to RCS Hot Leg	S6-2575-8						
C3.50	Loop 1 (10-16)	[2.2-4]	VT-3 (VT-4)	3	C-E 1 Support 100% 1 1	 One Two Three	C-E 33 67 100	
	SIS to RCS Hot Leg	S6-2576-8						
	Loop 2 (10-16)	[2.2-4]	VT-3 (VT-4)	3	C-E 1 Support 100% 1 1	 One Two Three	C-E 33 67 100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C,C-E	Support Members - Cont'd							
C3.40	Support Attach't							
C3.50	Support Component							
	+(C-F) Multiple Stream							
	(Cont'd)	Line No. & ISI DWG. No.						
C3.40	Cent Charge Pmp Suc	S6-42-6	VT-3	6	C-E		C-E	
C3.50	Pmp 1-1 (08-21)	[2.2-15]	(VT-4)		2 Supports 100%	One	33	
					2	Two	67	
					2	Three	100	
	Cent Charg Pmp Suct	S2-43-6	VT-3	3	C-E		C-E	
	Pmp 1-2 (08-20)	[2.2-8]	(VT-4)		1 Support 100%	One	33	
					1	Two	67	
					1	Three	100	
C3.40	RWST to Res Ht Rem	S1-223-12IIIP	-	-	-	-	-	No supports
C3.50	Pps Suct (10-10)	[2.2-2]						in boundary
C3.40	Res Ht Rem to Charg	S2-734-8IIIP	VT-3	2	C-E		C-E	
C3.50	Pps Suct (09-2)	[2.2-3]	(VT-4)		1 Support	One	50	
					1	Two	100	
C3.40	RHR to Charg Pps	S1-1971-8III	VT-3		C-E		C-E	
C3.50	Suct (09-2)	[2.2-3]	(VT-4)	3	1 Support 100%	One	33	
					1	Two	67	
					1	Three	100	
C3.40	RHR to SIS Pp 1-2 and	S1-735-8III	VT-3	2	C-E		C-E	
C3.50	Cont Spray (10-5)	[2.2-16]	(VT-4)		1 Support 100%	One	50	
					1	Two	100	
						Three	100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C,C-E	Support Members - Cont'd							
C3.40	Support Attach't							
C3.50	Support Components							
	+(C-G) Single Stream							
		Line No. & ISI DWG. No.						
C3.40	RHR to Safety Injec-	S1-1984-8III						
	tion Pmp 1-2							
C3.50	(09-28)	[2.2-17]	VT-3	8	C-E		C-E	
			(VT-4)		3 Supports 100%	One	37	
					3	Two	75	
					2	Three	100	
C3.40	Safety Inj Pumps	S2-1986-8						
C3.50	Suction Hdr (09-5)	[2.2-18]	VT-3	5	C-E		C-E	
			(VT-4)		1 Support 100%	One	33	
					2	Two	67	
					2	Three	100	
C3.40	Residual Heat Rem to	S1-2212-8						
C3.50	RWST (10-19)	[2.2-7]	VT-3	2	C-E		C-E	
			(VT-4)		1 Support 100%	Two	50	
					1	Three	100	
C3.40	Charging Pumps Disch	S6-1973-6						
C3.50	Emerg (08-1)	[2.2-10]	VT-3	1	C-E		C-E	
			(VT-4)		1 Support 100%	Three	100	
C3.40	Boron Injection Tank	S6-2032-6III						
C3.50	Inlet (09-6)	[2.2-19]	VT-3	3	C-E		C-E	
			(VT-4)		1 Support 100%	One	33	
					1	Two	66	
					1	Three	100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							
C-C,C-E	Support Members - Cont'd							
C3.40	Support Attach't							
C3.50	Support Component							
	+(C-G) Single Stream, Cont'd	Line No. & ISI DWG. NO.						
C3.40	X-Tie Chg Pp & SI Pp	S2-4296-6						
C3.50	Suction (09-3)	[2.2-20]	VT-3 (VT-4)	2	C-E 1 Support 100% 1	One Two	C-E 50 100	Applicable Mark No. Weld No.
C3.40	RHR to Safety Injection Pump 1-1	S2-6						
C3.50	(09-3)	[2.2-20]	VT-3 (VT-4)	1	C-E 1 Support 100%	One	C-E 100	
	+(C-G) Multiple Stream							
C3.40	Steam Gen Steam	K15-228-28V	PT or MT	1	C-C	One	C-C 100	1020-1V/LUGS
C3.50	Outlet 1-1 (500136)	[2.2-21]	VT-3	10	C-E		C-E	
		Lead 1	(VT-4)		3 Supports 100% 3 4	One Two Three	30 60 100	
	Steam Gen Steam	K15-227-28V	PT or MT	1	C-C	Two	C-C 100	1022-1V/LUGS
	Outlet 1-2 (500137)	[2.2-22]	VT-3	11	C-E		C-E	
		Lead 2	(VT-4)		4 Supports 100% 4 3	One Two Three	35 70 100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
C-C,C-E	SUPPORTS - Cont'd Support Members -Cont'd								C-C Applicable Mark No. Weld No.
C3.40	Support Attach't								
C3.50	Support Component +(C-G) Multiple Stream Cont'd	Line No. & ISI DWG. NO.							
C3.40	Steam Gen Steam	K15-226-28V	PT or MT	1	C-C		Three	100	1026-1V/LUGS
C3.50	Outlet 1-3 (500138)	Lead 3	VT-3	8	C-E			C-E	
		[2.2-23]	VT-4		3 Supports	100%	One	38	
					3		Two	75	
					2		Three	100	
	Steam Gen Steam	K15-225-28V	PT or MT	1	C-C		Three	100	1028-1V/LUGS
	Outlet 1-4 (500139)	Lead 4	VT-3	10	C-E			C-E	
		[2.2-24]	(VT-4)		3 Supports	100%	One	30	
					3		Two	60	
					4		Three	100	
C3.40	Main Stm Relief Vlv.	K15-1065-24V							
C3.50	Hdr. 1-3 (500138)	Lead 3	VT-3	5	C-E			C-E	
		[2.2-23]	(VT-4)		2 Supports	100%	One	40	
					2		Two	80	
					1		Three	100	
	Main Stm Relief Vlv.	K15-1066-24V							
	Hdr. 1-4 (500139)	Lead 4	VT-3		C-E			C-E	
		[2.2-24]	(VT-4)	6	2 Supports	100%	One	33	
					2		Two	67	
					2		Three	100	

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MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd								
C-C,C-E	Support Members - Cont'd								C-C
C3.40	Support Attach't								
C3.50	Support Component								
	+(C-G) Multiple Stream								
	(Cont'd)								Applicable
		Line No. & ISI DWG. No.							Mark No. / Weld No.
C3.40	Stm Gen Feed Wtr	K16-554-16V	PT or MT	1	C-C		One	C-C	1037-7V/Param't
C3.50	Supply Gen 1-1	Lead 1	VT-3	9	C-E			C-E	
	(500146)(03-23)	[2.2-25]	(VT-4)		3 Supports	100%	One	33	
	(Page 1)				3		Two	67	
					3		Three	100	
	Steam Gen Feed Wtr	K16-555-16V	PT or MT	1	C-C		Three	100	1039-9V/Param't
	Supply Gen 1-2	Lead 2	VT-3	10	C-E			C-E	
	(500146) (03-24)	[2.2-26]	(VT-4)		3 Supports	100%	One	30	
	(Page 2)				3		Two	60	
					4		Three	100	
	Steam Gen Feed Wtr	K-16-557-16V	PT or MT	1	C-C		Three	100	1042-9V/Param't
	Supply Gen 1-3	Lead 3	VT-3	7	C-E			C-E	
	(500146) (03-212)	[2.2-27]	(VT-4)		2 Supports	100%	One	29	
	(Page 3)				3		Two	71	
					2		Three	100	
	Steam Gen Feed Wtr	K16-556-16V	PT or MT	1					
	Supply Gen 1-4	Lead 4	VT-3	9	C-C		Two	100	1044-7V/Param't
	(500146) (03-209)	[2.2-28]	(VT-4)		C-E			C-E	
	(Page 4)				3 Supports	100%	One	33	
					3		Two	67	
					3		Three	100	

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PIPING - SUPPORTS(C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS cont'd							
C-C,C-E	Support Members - Cont'd							
C3.40	Support Attach't							
C3.50	Support Component							
	+(C-G) Multiple Stream							
	(Cont'd)	Line No. & ISI DWG. No.						
C3.40	Cont Sump to RHR Pps	S1-512-14III	VT-3	6	C-E		C-E	
C3.50	Pmp 1-1 Suct (10-9)	[2.2-11]	(VT-4)		2 Support 100%	One	33	
	(PDM) (500190)				2	Two	67	
					2	Three	100	
	Cont Sump to RHR Pps	S1-513-14III	VT-3	5	C-E		C-E	
	Pmp 1-2 Suct (10-18)	[2.2-12]	(VT-4)		2 Support 100%	One	40	
	(PDM) (500190)				1	Two	60	
					2	Three	100	
C3.40	Charg Pps Suction	S2-1987-8	VT-3	4	C-E		C-E	
C3.50	From RWST Vlv. A	[2.2-29]	(VT-4)		1 Support 100%	One	25	
	(09-11)				1	Two	50	
					2	Three	100	
	Charge Pps Suction	S2-1988-8	VT-3	3	C-E		C-E	
	from RWST Vlv. B	[2.2-29]	(VT-4)		1 Support	One	33	
	(09-11)				1	Two	67	
					1	Three	100	

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MAJOR ITEM: PIPING - SUPPORTS (C-C,C-E)
TABLE: 2.2
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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
	SUPPORTS - Cont'd							C-C
C-C,C-E	Support Members - Cont'd							
C3.40	Support Attach't							Applicable
C3.50	Support Component							
	+(C-G) Multiple Stream							Mark Weld
	Cont'd	Line No. & ISI DWG. NO.						No. No.
C3.40	RHR Sup to Spray	S1-279-8IIIP	PT	1	C-C	One	100	57S-70V/Param't
C3.50	Hdrs 1 & 3 (09-2)	[2.2-3]	VT-3	15	C-E		C-E	Valve C3.110
			(VT-4)		5 Supports 100%	One	33	Item
					5	Two	67	
					5	Three	100	
	RHR Sup to Spray	S1-280-8IIIP						
	Hdrs 2 & 4 (10-5)	[2.2-16]	VT-3	7	C-E		C-E	
			(VT-4)		2 Supports 100%	One	29	
					3	Two	71	
					2	Three	100	
C3.40	RHR Pp Inj Cold Leg	S6-508-8III	PT	2	C-C	Three	100	58N-49R/X370A,B
C3.50	Pp 1-1 (09-38)	[2.2-30]	VT-3	28	C-E		C-E	58N-52A/X426A-C
	(09-39)	[2.2-31]	(VT-4)		9 Supports 100%	One	32	
	(09-40)	[2.2-32]			9 Supports	Two	64	
					10	Three	100	
	RHR Pp Inj Cold Leg	S6-509-8III	PT	1	C-C	One	100	57N-5R/Param't
	Pp 1-2 (09-41)	[2.2-33]	VT-3	10	C-E		C-E	
	(09-43)		(VT-4)		4 Supports 100%	One	40	
					3	Two	70	
					3	Three	100	

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MAJOR ITEM: PIPING - SUPPORTS (C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS Cont'd							
C-C,C-E	Support Members - Cont'd							C-C
C3.40	Support Attach't							
C3.50	Support Component							Applicable
	+(C-G) Multiple Stream							
	Cont'd	Line No. & ISI DWG. NO.						Mark No. / Weld No.
C3.40	RHR Pp 1-1 Inj Cold	S6-3844-6III	PT	1	C-C			42-37A/X394A-E
C3.50	Leg Loop 1	[2.2-34]	VT-3	7	C-E		C-E	
	(09-36)				2 Supports 100%	One	29	
					2	Two	57	
					3	Three	100	
	RHR Pp 1-1 Inj Cold	S6-3845-6III						
	Leg Loop 2	[2.2-35]	VT-3	9	C-E		C-E	
	(09-37)		(VT-4)		3 Supports 100%	One	33	
					3	Two	67	
					3	Three	100	
	RHR Pp 1-1 Inj Cold	S6-3846-6III	-	-	-	-	-	No Supports
	Leg Loop 3	[2.2-33]	-	-	-	-	-	In Boundary
	(09-43)							
	RHR Pp 1-1 Inj Cold	S6-3847-6III						
	Leg Loop 4	[2.2-37]	VT-3	2	C-E		C-E	
	(09-42)		(VT-4)		1 Support 100%	One	50	
					1 Support	Two	100	

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MAJOR ITEM: PIPING - SUPPORTS (C-C)(C-E)
TABLE: 2.2
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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
	SUPPORTS Cont'd							
C-C,C-E	Support Members - Cont'd							C-C Applicable
C3.40	Support Attach't							
C3.50	Support Component (C-G) Multiple Stream Cont'd	Line No. & ISI DWG. NO.						Mark No. / Weld No.
							C-C	
C3.40	Safety Inj Pump	S2-1982-6	PT	1	C-C	One	100	98-14R/LUGS
C3.50	Suction Pump 1-1 (09-5)	[2.2-18]	VT-3 (VT-4)	3	C-E		C-E	
					1 Support 100%	One	33	
					1	Two	67	
					1	Three	100	
	Safety Inj Pump Suction Pmp 1-2 (09-5)	S2-1983-6 [2.2-18]	VT-3 (VT-4)	4	C-E		C-E	
					1 Support 100%	One	25	
					1	Two	50	
					2	Three	100	

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MAJOR ITEM: PUMPS (RHR PUMPS)
TABLE: 2.3
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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
	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.
	Residual Heat Removal Pumps	DWG. REF. DC-663217-26 * [2.3-1]						RHR Pumps Ingersoll Rand Serial No.'s 1-1 037050 1-2 A69-36
C-G	Pressure Retaining Welds							
C6.10	Pump Casing Welds	-	-	-	- -	-	-	C6.10 Items Not Applicable
C-D	Pressure Retaining Bolting							
C4.30	(Larger than 2 inch dia.)	-	-	-	- -	-	-	C4.30 Item Not Applicable
C-C	SUPPORT MEMBERS							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)	-	-	-	- -	-	-	C3.70 Item Not Applicable
C3.80	Support Components	Support Plates		(2)				The RHR Pumps Are Resting On A Plate Imbedded In The Deck
	RHR Pump 1-1	Plate 1-1	VT-3	1	- Exposed Areas -	One	100	
	RHR Pump 1-2	Plate 1-2	VT-3	1	- Exposed Areas -	Two	100	

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MAJOR ITEM: PUMPS (RHR PUMPS)(SI PUMPS)
TABLE: 2.3
PAGE 2 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
C-E	RHR PUMPS - Cont'd Support Members							
C3.90	Supports Mechanical and Hydraulic Snubbers	-	-	-	- -	-	-	C3.90 Item Not Applicable
	Safety Injection Pumps	DWG. REF. * [2.3-2]						[*] ISI DWG. Page No. Pacific Pump Serial Nos. 1-1 45497 1-2 45498
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 & Nuts SI Pump 1-1 OR† SI Pump 1-2	Casing Bolts	UT	8	All Bolts (Number 5 on dwg. 2.3-2) 100%	†Dependent on Maintenance Schedule Due to Design	100	Relief No. 009 Dia. = 2.12"
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)	-	-	-	- -	-	-	C3.70 Item Not Applicable

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ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PUMPS (SI PUMPS)(CENT.CHG.)
TABLE: 2.3
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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
	SI PUMPS - Cont'd							
C-C	Support Members							
C3.80	Support Components	Support Base		(2)				The SI pumps are resting on concrete foundations [*] ISI DWG. Page No.
	SI Pump 1-1	Base 1-1	VT-1	1	Exposed Areas	One	100	
	SI Pump 1-2	Base 1-2	VT-1	1	Exposed Areas	Two	100	
C3.90	Supports, Mech.or Hyd.	-	-	-	- -	-	-	C3.90 Item Not Applicable
	Centrifugal Charging Pumps	DWG. REF. DC-663210-146						Pacific Pumps Serial Nos. 1-1 45611 1-2 45612
C-G	Pressure Retaining Welds	* [2.3-3]						
C6.10	Pump Casing Welds							
	Cent'l Pmp 1-1	Branch Weld to Upper Case	PT	(1)	360° Weld N-A	Two †Dependent on Maintenance Schedule Due to Design	100	Suction Side Six inch 150# Flange
	OR†							
	Cent'l Pmp 1-2	[2.2-3]			360°†			Exam. req'd on only one pump
C6.10	Cent'l Pmp 1-1 or† 1-2	Machined Weld # 17	VT-1 PT	1	One Weld 100%		100	Relief No. 010

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MAJOR ITEM: PUMPS (CENT CHRG)
TABLE: 2.3
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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
	CENT'L CHG. PUMPS - Cont'd							
C-D	Pressure Retaining Bolting (Larger than 2 inch Dia.)							
C4.30	Bolts, Studs & Nuts	[2.2-3]						C4.30 Item Not Applicable
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)	Welded Attach't		(8)			(100%)	
	Cent'l Pmp 1-1	Weld A-D	PT or MT	4	4 Attach'ts 100%	One	50	
	Cent'l Pmp 1-2	Weld A-D	PT or MT	4	4 Attach'ts 100%	Three	100	
C-E	Support Members							
C3.80	Support Components	Support Base		(2)				The Cent'l Chg. Pmps Are Resting On Concrete Foundations
	Cent'l Pmp 1-1	Base 1-1	VT-3	1	Exposed Areas	One	50	
	Cent'l Pmp 1-2	Base 1-2	VT-3	1	- -	-	-	
C3.90	Supports,Mech & Hyd	-	-	-	- -	-	-	C3.90 Item Not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: PUMPS (RECIP'G CHARG)
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 Pumps	DWG. REF. DC-663210-143 * [2.3-4]			See Footnotes Page 1, This Section			[*] ISI DWG. Page No. Union Pump #1-3 SN 274173
C-G	Pressure Retaining Welds In Pumps and Valves							
C6.10	Pump Casing Welds	-	-	-	- -	-	-	C6.10 Item Not Applicable
C-D	Pressure Retaining Bolting (Larger than 2 inch Dia.)							
C4.30	Bolts, Studs & 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		(1)				The Recip'g Pmp is Resting On Concrete Foundation
	Recipr'g Pmp 1-3	Base 1-3	VT-3	1	Exposed Areas	Two	100	
C3.90	Supports, Mech & Hyd	- Remarks -	-	-	- -	-	-	C3.90 Item Not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

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	See Note				Note: 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	See Note	-	-	- -	-	-	C6.20 Item Not Applicable
C-D	Pressure Retaining Bolting (Larger than 2-inch dia.)							
C4.40	Bolts, Studs & Nuts	See Note	-	-	- -	-	-	C4.40 Item Not Applicable
C-C	Support Members							
C3.100	Integrally Welded Support Attachments (To Pressure Boundary)	See Note	-	-	C3.100, C3.110 and C3.120 Code Items are Summarized under Tab Section 2.2 and included with their respective Piping Systems under Code Items C3.40, C3.50 and C3.60. Table 2.2 describes the support amounts by line number and nomenclature. All supports are scheduled per Code requirements.			
C3.110	Component Supports	See Note	-	-				
C3.120	Supports, Mech & Hyd.	See Note	-	-				

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.

NOTE: Hanger totals have been updated to reflect changes made during the Seismic Reverification Program.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C:

TABLE 3.1
COMPONENT SUPPORTS (ALL TYPES)

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
AUXILIARY FEEDWATER PUMP				
1-1	33C	DC-663056	VT-3	Pumps rest on 4 integral legs to base pad.
1-2	33B	24,25	VT-3	
1-3	33A		VT-3	
LETDOWN HEAT EXCHANGER				
1-1	313C	DC-663210-11	VT-3	Vessel has 2 supports to base.
SEAL WATER HEAT EXCHANGER				
1-1	311C	DC-663210-7	VT-3	Vessel has 2 supports to base.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: COMPONENT SUPPORTS (ALL TYPES)

TABLE 3.1

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
RESIDUAL HEAT REMOVAL PUMP SEAL WATER COOLER				
1-1	211D, 325C	DC-663217-9,16	VT-3	Coolers have bracket to RHR PP.
1-2	211D, 271C		VT-3	
SPENT FUEL PIT HEAT EXCHANGER				
1-1	316C	DC-663211-7	VT-3	Vessel has 2 supports to base.
COMPONENT COOLING WATER SURGE TANK				
1-1	257B	DC-663225-2	VT-3	Tank has 2 braced supports to base.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: COMPONENT SUPPORTS (ALL TYPES)

TABLE 3.1

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
COMPONENT COOLING WATER PUMP				
1-1	262C	DC-663213-1	VT-3	Pumps have 4 integral legs to base.
1-2	264C		VT-3	
1-3	266C		VT-3	
COMPONENT COOLING WATER HEAT EXCHANGER				
1-1	257E, 356C	DC-663212-1, 2	VT-3	Vessels have 2 supports to base.
1-2	257D, 357C		VT-3	
COMPONENT COOLING WATER PUMP LUBE OIL COOLER				
1-1	263C	DC-663213-4	VT-3	Coolers mounted to pumps.
1-2	265C		VT-3	
1-3	267C		VT-3	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: COMPONENT SUPPORTS (ALL TYPES)

TABLE 3.1

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
CENTRIFUGAL CHARGING PUMP LUBE OIL, GEAR OIL AND SEAL COOLERS				
1-1	321C	DC-663210-40,47,50	VT-3	Cooler brackets mount to pumps.
1-2	273C		VT-3	
SAFETY INJECTION PUMP LUBE OIL AND SEAL COOLERS				
1-1	275C	DC-663216-26,32	VT-3	Cooler brackets mount to pumps.
1-2	326C		VT-3	

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
REACTOR CONTAINMENT FAN COOLERS AND MOTOR HEAT EXCHANGER				
1-1	279C	DC-663079-1,2,5,9	VT-3	Examined as accessible.
1-2	278C		VT-3	
1-3	329C		VT-3	
1-4	328C		VT-3	
1-5	277C		VT-3	
RECIPROCATING CHARGING PUMP FLUID DRIVE & LUBE OIL COOLERS				
1-3	288C	DC-663210-25	VT-3	Coolers are mounted to pump.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: COMPONENT SUPPORTS (ALL TYPES)

TABLE 3.1

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
REACTOR COOLANT PUMP UPPER BEARING OIL COOLERS				
1-1	294D	DC-663207-4,6	VT-3	Cooler mount To brackets At Top of R.C. Pumps.
1-2	290D		VT-3	
1-3	292D		VT-3	
1-4	293D		VT-3	
CONDENSATE STORAGE TANK				
1-1	332D	DC-663071-27	VT-3	Base of tank rests on concrete foundation.
FIREWATER TRANSFER TANK				
0-1	338D	438038	VT-3	Base of tank rests on concrete foundation.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: COMPONENT SUPPORTS (ALL TYPES)

TABLE 3.1

COMPONENT OR SYSTEM	P&ID 102028 CO-ORD.	PGandE REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
MAKE-UP WATER TRANSFER PUMPS				
0-1	333B	DC-663062-3	VT-3	Pump mount on bed plate.
0-2	335B		VT-3	
AUXILIARY SALT WATER PUMPS				
1-1	354C	DC-663030-1	VT-3	Pump mount to deck.
1-2	354C		VT-3	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
FEEDWATER SYSTEM - SYS 03				*VT-4 As Appl.	
AUX FW PP 1-1 SUCTION	K-558-8	31C	447118	VT-3	2
AUX FW PP 1-1 RAW WTR SUCT	K-561-8	30B	447118	VT-3	1
AUX FW PPS 2 + 3 CNDS SUCT HDR	K-562-8	30B	447118	VT-3	4
AUX FW PP 1-2 SUCTION	K-559-6	31B	447118	VT-3	2
AUX FW PP 1-3 SUCTION	K-560-6	30A	447118	VT-3	2
AUX FW PP 1 DISCH HDR	K16-568-6	33C	445878	VT-3	7
AUX FW PP 1-2 RAW WTR SUCT	K-488-6	31B	447118	-	None
AUX FW PP 1-3 RAW WTR SUCT	K-489-6	31A	447118	VT-3	1
AUX FW PPS RAW WTR SUCT HDR.	K-638-8	31A	447118	VT-3	3
TURBINE STEAM SUPPLY SYSTEM - SYS 04					
AUX FEED PP 1-1 TURB EXH	K-1045-10	63C	447119	VT-3,VT-4	7

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
COMPONENT COOLING WATER SYSTEM SYS 14					
CCW HT EXCH 1 CCW INLET	K-95-30	253-E	449316	VT-3,VT-4	20
CCW HT EXCH 2 CCW INLET	K-96-30	253-D	449316	VT-3,VT-4	19
CCW HT EXCH 1 CCW OUTLET	K-101-30	258-E	449316	VT-3,VT-4	2
CCW HT EXCH 2 CCW OUTLET	K-102-30	258-D	449316	VT-3,VT-4	2
CCW HT EXCH OUTLET CROSSTIE	K-98-24	258-E	449316	-	None
CCW RETURN HEADER A	K-81-20	254A,262A,277A,281A, 291A,304A,311A,322A	449316 449314	VT-3,VT-4	10
CCW RETURN HEADER B	K-82-20	254A,262B,270B	449316 449314	VT-3,VT-4	14
COMP CLG PP 1 DISCH	K-89-20	251-E	449316	VT-3	1
COMP CLG PP 2 DISCH	K-90-20	252-E	449316	VT-3	1
COMP CLG PP 3 DISCH	K-91-20	254-E	449316	VT-3	1
CCW PP'S 1-2 & 1-3 SUCT CROSSTIE	K-97-20	252-C	449316	-	None
CCW SUPPLY HEADER A	K-103-20	259E,263E,272E,281E, 291E,304E,311E,322E	449316 449314	VT-3,VT-4	12

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
CCW SUPPLY HDR B	K-104-20	259D,263D,270D	449316 449314	VT-3,VT-4	11
CCW SUPPLY HDR C	K-2277-20	259D,273E,270E, 281E,291E	449315 449316	VT-3,VT-4	13
CCW RETURN HDR C	K-2282-20	254A,263B,277B, 280B,291A	449315 449316	VT-3,VT-4	14
CCW PP'S 1-1 & 1-2 SUCT CROSSTIE	K-2285-20	251C	449316	-	None
COMP CLG PP 1 DISCH HDRS A & B	K-2994-20	251E	449316	VT-3,VT-4	8
COMP CLG PP 2 DISCH HDRS A & B	K-3036-20	253E	449316	-	None
CONT FAN CLR CCW SUP HDR B	K-105-18	272D	449314	VT-3,VT-4	16
CONT FAN CLR CCW RET HDR B	K-106-18	271B	449314	VT-3,VT-4	13
CCW SUPPLY HDR C	K-2278-18	296E,304E,311E	449315	VT-3	3
CCW RETURN HDR C	K-2281-18	293A,304A,311A	449315	VT-3,VT-4	6
CCW RETURN HEADER B BYPASS	K-2369-18	276B	449314	VT-3,VT-4	2

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
CONT FAN CLR SUPPLY HDR A	K-146-16	324E	449314	VT-3,VT-4	11
CONT FAN CLR RETURN HDR A	K-147-16	324A	449314	VT-3,VT-4	10
CCW RETURN HEADER A BYPASS	K-2399-16	326B	449314	VT-3,VT-4	2
RHR HT EXCH 2 CCW SUPPLY	K-94-12	270D,203C	449314	VT-3	2
RHR HT EXCH 2 CCW RETURN	K-99-12	270B,203C	449314	VT-3,VT-4	4
RHR HT EXCH 1 CCW SUPPLY	K-124-12	324D,203E	449314	VT-3	3
RHR HT EXCH 1 CCW RETURN	K-127-12	324B,204E	449315	VT-3,VT-4	3
SPENT FUEL HT EXCH CCW SUP	K-152-12	316D	449315	VT-3	4
SPENT FUEL HT EXCH CCW RET	K-153-12	316C	449315	VT-3,VT-4	6
CCW SUPPLY HDR C	K-2279-12	316E	449315	VT-3	2
CCW RETURN HDR C	K-2280-12	316B	449315	VT-3,VT-4	2
CONT FAN CLR 5 CCW SUPPLY	K-3279-12	277D	446503	VT-3,VT-4	3

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
CONT FAN CLR 4 CCW SUPPLY	K-3280-12	327E	446503	VT-3,VT-4	3
CONT FAN CLR 3 CCW SUPPLY	K-3281-12	328E	446503	VT-3,VT-4	4
CONT FAN CLR 2 CCW SUPPLY	K-3282-12	278D	446503	VT-3	3
CONT FAN CLR 1 CCW SUPPLY	K-3283-12	279D	446503	VT-3	1
CONT FAN CLR 5 CCW RTRN	K-3284-12	277B	446503	VT-3,VT-4	4
CONT FAN CLR 4 CCW RTRN	K-3285-12	327A	446503	VT-3,VT-4	3
CONT FAN CLR 3 CCW RTRN	K-3286-12	328A	446503	VT-3,VT-4	5
CONT FAN CLR 2 CCW RTRN	K2-3287-12	278B	446503	VT-3,VT-4	4
CONT FAN CLR 1 CCW RTRN	K2-3288-12	279B	446503	VT-3,VT-4	2
CONT FAN CLR 5 CCW SUPPLY	K2-314-12	277D	446491 446503	VT-3,VT-4	17
CONT FAN CLR 4 CCW SUPPLY	K2-315-12	327D	446491 446503	VT-3,VT-4	13
CONT FAN CLR 3 CCW SUPPLY	K2-316-12	328D	446492 446503	VT-3,VT-4	21
CONT FAN CLR 2 CCW SUPPLY	K2-317-12	278D	446493 446503	VT-3,VT-4	16

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
CONT FAN CLR 1 CCW SUPPLY	K2-318-12	299D	466494 466503	VT-3,VT-4	20
CONT FAN CLR 5 CCW RETURN	K2-319-12	297C	466491 446503	VT-3,VT-4	15
CONT FAN CLR 4 CCW RETURN	K2-320-12	347B	446491 446503	VT-3,VT-4	12
CONT FAN CLR 3 CCW RETURN	K2-321-12	348B	446492 446503	VT-3,VT-4	19
CONT FAN CLR 2 CCW RETURN	K2-322-12	298C	446493 446503	VT-3,VT-4	20
CONT FAN CLR 1 CCW RETURN	K2-323-12	299C	446494 446503	VT-3,VT-4	21
REAC COOL PPS CCW SUP HDR	K-133-10	312E	445876 449315	VT-3,VT-4	2
BA & WASTE CONC CCW SUP HDR	K-148-10	322D	451411	VT-3	7
BA & WASTE CONC CCW RET HDR	K-149-10	322B	451411	VT-3,VT-4	7
RC PPS CCW SUPPLY HDR	K2-3007-10	312E	445876	VT-3,VT-4	1

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
REAC COOL PPS CCW SUP HDR	K-180-10	312E	446495	VT-3,VT-4	3
WASTE CONC CCW RTRN HDR	K-1951-10	324B	451411	VT-3	1
WASTE CONC CCW SUPPLY HDR	K-2207-10	324D	451411	-	None
LTDN HT EXCH CCW SUPPLY	K-125-8	333D	449315	VT-3,VT-4	4
LTDN HT EXCH CCW RTRN	K-126-8	333C	449315	VT-3,VT-4	6
WASTE CONC CCW SUPPLY HDR	K-150-8	325D	451411	VT-3	2
WASTE CONC CCW RTRN HDR	K-151-8	325B	451411	VT-3	1
RC PUMPS CCW SUP HDR	K-2296-8	312E	446495	VT-3,VT-4	9
BA CONC CCW SUP HDR	K-2312-8	321D	451411	VT-3	6
BA CONC CCW RTRN HDR	K-2341-8	321B	451411	VT-3	7
COMP CLG WTR PP 1 RECIRC	K-116-6	271D	449316	VT-3	2

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
COMP CLG WTR PP 2 RECIRC	K-117-6	252D	449316	VT-3	3
CCW SURGE TK CONN HDR B	K-121-6	257B	445881	VT-3,VT-4	11
CCW SURGE TK CONN HDR A	K-123-6	256A	445881	VT-3,VT-4	10
RCP OIL CLR CCW RTRN HDR	K-142-6	291A	445880	VT-3,VT-4	2
RCP BARRIER CCW RTRN HDR	K-143-6	293A	445880	VT-3,VT-4	4
COMP CLG WTR PP 3 RECIRC	K-157-6	254D	449316	VT-3	1
RC PPS BARRIER CCW RET HDR	K17-1357-6	293B	446490 445880	VT-3,VT-4	12
BA CONC EVAP COND CCW SUP	K-1759-6	301D	451411	VT-3	4
BA CONC EVAP COND CCW RET	K-1760-6	301B	451411	VT-3,VT-4	2
WASTE CONC EVAP COND CCW SUP	K-1767-6	305D	451411	VT-3	2
WASTE CONC EVAP COND CCW RET	K-1768-6	305B	451441	VT-3	1
RCP 4 CCW SUP HDR	K-1968-6	292D	446495	VT-3	5

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
RCP 3 CCW SUP HDR	K-2211-6	292D	446495	VT-3	2
RCP 1 CCW SUP HDR	K-2297-6	294D	446495	VT-3	14
RCP 2 CCW SUP HDR	K-2298-6	291D	446495	VT-3,VT-4	20
RC PUMPS OIL CLR CCW RET HDR	K-2311-6	292C	446498	VT-3,VT-4	14
RCP THERMAL BAR CCW RET HDR	K17-2340-6	292C	446490	VT-3,VT-4	16
RC PPS OIL CLR CCW RET HDR	K-3179-6	292C	445498	VT-3,VT-4	2
RC PPS OIL CLR CCW RET HDR	K2-3004-6	292B	445880	VT-3,VT-4	2

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P. & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
MAKEUP WATER SYSTEM-SYS 16					
AUX FW PPS CONDENSATE SUCT	K-380-10	30C, 332C	447118	VT-3	17
DIESEL ENGINE 1-1 JACKET WATER COOLING SYSTEM	*5	Page 37	N/A	VT-3	All*
DIESEL ENGINE 1-2 JACKET WATER COOLING SYSTEM	*5	Page 37	N/A	VT-3	All*
DIESEL ENGINE 1-3 JACKET WATER COOLING SYSTEM	*5	Page 37	N/A	VT-3	All*

*These systems have no designated supports.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: PIPING SUPPORTS (ALL TYPES)

TABLE 3.2

COMPONENT OR SYSTEM	LINE NO.	P & ID 102028 COORDINATE(S)	SEISMIC DWG. NO.	NDE METH	# OF SUPPORTS
SALTWATER SYSTEMS - SYS 17					
AUX SLTWTR PPS UNITS 1 + 2 X-TIE	G1-933-24	374C	57744 57750 57753	VT-3	1
COMP CLG HT EXCH 1 OUTLET	G1-713-24	377C	500032 500034	-	None
COMP CLG HT EXCH 2 OUTLET	G1-714-24	377C	500032 500034	-	None
AUX SLTWTR PP 1 DISCH	G1-687-24	374C	57744 57750 57753 57743 57745 500031 500034	VT-3	4
AUX SLTWTR PPS DISCH X-TIE	G1-676-24	374C	57750 57753 57745	VT-3	4
AUX SLTWTR PP 2 DISCH	G1-680-24	375C	57744 57750 57753 57743 57745 500031 500034	VT-3	5
MUS DEMIN DRAIN A TO OCEAN	G1-3681-6	378C	500031 500034	-	None
MUS DEMIN DRAIN B TO OCEAN	G1-3682-6	377C	500031 500034	-	None

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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 Shell-To-Flange and Head-To-Flange Welds.
NDE-004a	Reactor Vessel Nozzle-To-Vessel Welds and Inner Radius Section.
NDE-004b	Pressurizer Vessel Nozzle-To-Vessel Welds and Inner Radius Section
NDE-005	ASME Code Class 2 Exemption Criteria (IWC-1220).
NDE-006	Class 2 Pressure Vessel Nozzle and Shell Welds.
NDE-007	Class 2 Vessel Insulation Design.
NDE-008	Class 1 and 2 Pipe Weld Accessability.
NDE-009	Bolt Design For Safety Injection Pumps.
NDE-010	Centrifugal Charging Pump End Plate Weld Schedule.
NDE-011	Regenerative Heat Exchanger Shell Welds Examination Method
REP-001	Diesel Engine Block Repair and Replacement

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REQUESTS FOR RELIEF NDE-001
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - GIRTH WELD				(B1.10)
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 (10-442) allows only partial examination. Bottom Head Instrumentation Penetrations and Core Support Lugs (12) all interfere with remote tool accessability.

ALTERNATE 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 start-up to 120 months of operation.

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ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE-002
PAGE 2 of 12

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - HEAD WELDS				(B1.20)
Item: (a) Bottom Head (#4-443) Circ'l Welds &	1	1.1	B-A	B1.21
(b) Closure Head (#6-446B) Circ'l Weld	1	1.1	B-A	B1.21
Item: (c) Bottom Head Meridional Welds (#1-443A, through #1-443F)	1	1.1	B-A	B1.22
Item: (d) Closure Head Meridional Welds (#1-446A, through #1-446F)	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 6-446B and 1-446A to F during the interval; welds 4-443 and 1-443A to F may be deferred to the end of the inspection interval.

BASIS FOR REQUEST
Vessel Design of Bottom Head Weld (4-443) and Meridional Welds (1-443A to F) and Bottom Head Instrumentation Penetrations constitute Remote Ultrasonic Tool Examination Limitations.
Vessel Design of Closure Head Weld (6-446B) and Meridional Welds (1-446A to F) includes encirclement by the CRDM Penetrations and the Vessel Head Cooling Duct Shroud. These items and the three Top Head Lifting Lugs preclude full volumetric examination.

ALTERNATE EXAMINATION
The accessible length (38 inches) of each Closure 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.

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ASME SECTION XI SYSTEMS

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REQUESTS FOR RELIEF NDE-003
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL				
Item: Head-To-Flange Weld No. 6-446A	1	1.1	B-A	B1.30, 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. Alternate examination provides assurance of weld integrity.

ALTERNATE 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.

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REQUESTS FOR RELIEF NDE-004
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - NOZZLE WELDS				
Item: Primary Nozzle to Vessel Welds (a) 29 Inch Outlet Nozzles (Total 4) (Pipe Nominal Diameter) (b) 27.5 Inch Inlet Nozzles (Total 4) (Pipe Nominal Diameter)	1	1.1	B-D	B3.90 B3.100

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.

ALTERNATE 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.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE-004
PAGE 4b of 12

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
PRESSURIZER VESSEL - NOZZLE 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

Vesssel welds are accessible from vessel shell side only (not accessible from nozzle side due to configuration) surge nozzle is further limited by heater penetrations. Compound curvature of vessel shell combined with short radii of nozzles and surface geometry makes meaningful inner radius examination impossible.

ALTERNATE EXAMINATION

Volumetric examination of all nozzle welds as accessible. Pressure test per category B-P

SCHEDULED IMPLEMENTATION

Commercial start up to 120 months of operation.

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REQUESTS FOR RELIEF NDE-005
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
PIPING WELDS Item: Class 2 Piping Systems	2	2.2	C-F	(C5.10) C5.11, C5.12 (C5.20) C5.21, C5.22 (C5.30) C5.31, C5.32

CODE REQUIREMENT

The NDE Exemption Criteria established by IWC-1220 1974 Edition, Summer 75 Addenda is to be utilized to develop the DCPP Unit 1 Code Class 2 pipe weld ISI Program as indicated by 10CFR50.55a(b)(2)(iv)(B).

BASIS FOR REQUEST

PGandE does not concur with the basis for many of the Summer 75 Exemption Criteria. IWC-1220(a) utilizes 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 PGandE and ASME.

ALTERNATE CRITERIA

The class 2 NDE Exemption Criteria established by IWC-1220 1977 Edition, Summer 78 Addenda will be utilized to develop the DCPP Unit 2 Code Class 2 pipe weld ISI Program.

SCHEDULED IMPLEMENTATION

Commercial start-up to 120 months of operation.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE-006
PAGE 6a of 12

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
Seal Inj. Filter 1-1 Girth Welds Item A, B	2	2.1	C-A	C1.10, C1.20
Excess Letdown Ht. Exr. Girth Welds Item A, B	2	2.1	C-A	C1.10, C1.20
Regenerative Ht. Exr. Girth Welds 9,10,11,12	2	2.1	C-A	C1.20, C1.30
RHR Ht. Exchr. 1-1, 1-2 Girth Welds A, D	2	2.1	C-A	C1.10, C1.20
RHR Ht. Exchr. 1-1, 1-2 Nozzle Welds N-1, N-2	2	2.1	C-B	C2.20
Stabilizer Separator Girths Welds A,B	2	2.1	C-A	C1.20

CODE REQUIREMENTS

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

BASIS FOR REQUEST

Seal Injection Filter - The Seal Injection Filters are located in a vault that prohibits access for examination due to the proximity of the vault walls, piping and filter supports. Additionally, the vaults will be high radiation areas and the extremely limited access does not justify the personnel exposure involved.

Heat Exchangers and Stabilizer Separator - Shell configuration limits access on all vessels from the head or flange side. Additionally, welds on the heat exchangers are blocked by support member attachments. RHR Heat Exchanger Nozzle-to-Shell welds are limited by the vessel head, flange, and supports.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE-006
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM

ALTERNATE EXAMINATION

All Vessels - Pressure test per Category C-H. RHR Heat Exchanger Shell and Nozzle welds - Surface examination (IWC-2500-1).

All Other Heat Exchangers and Stabilizer Separator - Full Code volumetric examination as accessible. Surface examination of accessible areas of welds not accessible for volumetric examination.

All areas examined and all examination limitations will be documented at the time of examination.

SCHEDULED IMPLEMENTATION

Commercial start-up to 120 months of operation.

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ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE 007
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
STEAM GENERATORS				
Item: Circumferential Welds	2	2.1	C-A	C1.10
BORON INJECTION TANK				
Item Circumferential Welds	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 may be performed on one vessel, or a series of vessels, 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 when using vessels in composite. 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 (except Gen. 1-4) circumferential weld. The panels are distributed among vessels to total 100% of one vessel with a minimum total of 20% of each weld opened for examination when scheduled. It should be noted that as well as the primary tube sheet weld, the secondary side tube sheet weld will be exposed for 360° examination when scheduled. The proposed examination schedule outlined in Tab Section 2.1 in addition to the specified alternate examinations show that no design changes are justified to fulfill the latest approved Code Section XI and Addenda. 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.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

PART 4
REQUESTS FOR RELIEF NDE-007
PAGE 7b of 12

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

ALTERNATE EXAMINATION

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

SCHEDULED IMPLEMENTATION

Commercial start-up to 120 months of operation.

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ASME SECTION XI SYSTEMS

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REQUESTS FOR RELIEF NDE-008
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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

Surface configuration of pipe-to-component and in some cases pipe-to-fitting welds prohibits ultrasonic examination from the component or fitting side of the weld. In some cases, wall or floor penetrations or non-removable support members limit access from one side (or both sides) of the weld.

ALTERNATE EXAMINATION

Full Code examination of all welds and portions of welds as accessible. Pressure test as required by Category B-P or C-H.

SCHEDULE IMPLEMENTATION

Commercial start-up to 120 months of operation.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
SAFETY INJECTION PUMPS Item: Pump Casing Bolts (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 utilizing outside "acorn nuts" which preclude any 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 will be done once during the inspection interval.

ALTERNATE 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 start-up to 120 months of operation.

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REQUESTS FOR RELIEF NDE-010
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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.

ALTERNATE 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 start-up to 120 months of operation.

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REQUESTS FOR RELIEF NDE-011
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REGENERATIVE HEAT EXCH'R SHELL WELDS	2	2.2	C-A	C1.20/C1.30

CODE REQUIREMENT

Volumetric Examination of Head Circumferential Welds and Tubesheet to Shell Welds.

BASIS FOR REQUEST

Volumetric Examination by Radiography is not practicable due to; 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.

Volumetric Examination by Ultrasonics is not practicable because of the shell material, ASTM A351 Gr. CF and product form, centrifugally cast stainless steel. The inability of ultrasonic techniques to provide meaningful data is well documented.

ALTERNATE EXAMINATION

Liquid Penetrant examination of all applicable welds to the fullest extent practicable. Visual examination during scheduled pressured test and visual examination as scheduled for vessel supports.

SCHEDULED IMPLEMENTATION

Commercial start-up to 120 months of operation.

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REQUESTS FOR RELIEF REP-001
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COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	APPLICABLE CODE SECTIONS
DIESEL ENGINE 1-1, 1-2,1-3 JACKET WATER COOLING SYSTEMS: DIESEL ENGINE BLOCKS	3	3.1(Typical)	IWA-4000 IWA-7000 IWD-4000 IWD-7000

CODE REQUIREMENT

Repair and replacement of components in accordance with Section XI Code Rules.

BASIS FOR REQUEST

The diesel engine blocks were not built as pressure boundary components and repair and replacement rules of Section XI are not intended to apply to diesel engines. (Diablo Canyon diesels have a closed cooling system with radiators and are not connected to the component cooilng water system.)

ALTERNATE ACTION

Should the need arise, the diesel engine blocks will be repaired/replaced using good engineering/maintenance practice and/or the manufacturer's (ALCO) recommendations. All changes to the original specification shall be approved by PGandE's Engineering Department.

SCHEDULED IMPLEMENTATION

Commercial start up to 120 months of operation.

APPENDIX A

DIABLO CANYON CALIBRATION STANDARDS

ULTRASONIC STANDARDS

NO.	MAT'L	DIA.	WALL THICKNESS
1	SS	1 1/2" pipe	0.281" T
2	SS	2" pipe	0.343" T
3	SS	3" pipe	0.438" T
4	SS	4" pipe	0.438" T
5	SS	6" pipe	0.280" T
6	SS	6" pipe	0.718" T
7	SS	8" pipe	0.322" T
8	SS	8" pipe	0.812" T
9	SS	10" pipe	1.000" T
10	SS	12" pipe	0.406" T
11	SS	14" pipe	0.438" T
12	SS	14" pipe	1.406" T
13	CS	16" pipe	0.843" T
14	CS	24" pipe	0.968" T
15	CS	28" pipe	1.002" T
16	SS	12" pipe	1.312" T
17	SS	6" X 8 1/2" plate	1/2" T
18	SS	8 1/2" X 8 3/4" plate	1" T
19	SS	12" X 13" pipe	0.900" T
20	SS	12" X 12" pipe	1.250" T
21	CS	12" X 12" pipe	0.688" T
22 A	SS	31" pipe	2"
22 B	SS	31" pipe	2"
23	SS	1 ft. pipe	5/8" T
24	SS	6" pipe	0.134" T
25	SS	8" pipe	0.148" T
26	SS	2" X 1.20"X300"	
27	SS		3" T

APPENDIX A(Cont'd)

DIABLO CANYON CALIBRATION STANDARDS

ULTRASONIC STANDARDS(Cont'd)

NO.	MAT'L	DIA.	WALL THICKNESS
W - RC Pipe	SS	4" W X 9" L	2 3/8"
W #001	SS		
W #003	SS	9" X 1'1"	1 1/2"
W #004	CS		
W #011	SS	10"	1 "
W CRDM	SS	4" pipe	.531"
W #015	CS	3" X 3" X 10 3/8" plate	3 "
W #016	CS		

EDDY CURRENT STANDARDS

# 11	Inconel	7/8"	0.05"
# 2784	Inconel 600	7/8"	.049"
# 31	Inconel 600	7/8"	0.05"
# 2-909	Inconel 600	7/8"	.049"
# 2-910	Inconel 600	7/8"	.049"

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 3" or less O, All Sch. Tp. 304, PT

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

NOTE 1: Class 1 lines smaller than 4" diameter are no long 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).

APPENDIX A(Con't)

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	S7	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(Con't)

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
-	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 1: 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).

FOOTNOTES:

(1) IDENTIFIES THE DRAWING SHEET NUMBER OF THE ASME CODE CLASSIFICATION DRAWINGS, PGandE DRAWING 102028.

(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.

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

TABLE 5.1

SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
1. REACTOR COOLANT PUMPS 1-1, 1-2, 1-3, 1-4	8	IWB-5221 IWB-5222	2235 2459 *	R I	P_o = 2235 psig for Class 1 Piping
2. STEAM GENERATORS 1-1, 1-2, 1-3, 1-4 (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 & instrumentation partial penetration welds
4. PRESSURIZER 1-1	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	*2459 is the highest pressure required for RCS normal operating pressure Tests ($1.1xP_o$ for < 200°F) usually the main RCS Piping will be pressure tested at > 500° using a factor of 1.02x P_o (2280 PSIG) however, isolatable branches of piping would be tested at the corresponding pressure prorated to their actual test temperatures
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-5221 IWB-5222	2235 2459 *	R I	

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

TABLE 5.1

SYSTEM PRESSURE TEST SUMMARY
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)
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	

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

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
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 1-3 & 1-4 (SHELL SIDE)	5	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
4. MAINSTEAM LEADS 3 & 4 AND RELIEF HEADERS	5	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
5. MAINSTEAM LEADS 1 & 2	6	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
6. STEAM GENERATORS 1-2 & 1-1	6	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
7. AUXILIARY FEED PUMP 1-1. TURBINE STEAM LEAD	5,6	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
8. STEAM GENERATOR BLOWDOWN CLEANUP SYSTEM	5,6,7	IWC-5222 (a)	1331	I	P_{SV} = 1065; NOTE 1
9. LOOP 1 & 4 HOT LEG SAMPLE LINES S-1675-3/8 & S6-1676-3/8	8,22	IWC-5222 (a)	2459*	I	NO SAFETY VALVE IN SYSTEM - TESTED WITH CLASS 1; NOTE 1

DIABLO CANYO.. POWER PLANT – UNIT I
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS – CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
10. PRESSURIZER SAMPLE LINES S-1673-3/8 & S-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 1-1 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 S6) TO VALVE 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 (8393 TO 8372)	12	IWC-5222 (a)	2459 *	I	REQUEST FOR RELIEF #5; NOTE 1
16. REGENERATIVE HEAT EXCHANGER 1-1 SHELL SIDE AND LETDOWN PIPING TO 8153	13	IWC-5222 (a)	750	I	P_{SV} = 600; NOTE 1

DIABLO CANYON POWER PLANT – UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS – CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
17. BORIC ACID PUMPS DISCHARGE HEADER, BA BLENDER INLET, RECIRC TO BIT TO 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 8147, 8146, 8145, 8148, 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

DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
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 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-5222 (a)	2459 *	I	NO SAFETY VALVE IN SYSTEM - TESTED WITH CLASS 1
		IWC-5221	2235	P	TESTED WITH CLASS 1
28. SAFETY INJECTION ACCUMULATORS AND ASSOCIATED PIPING	17	IWC-5222 (a)	875	I	P_{SV} = 700; NOTE 1
29. ACCUMULATOR SAMPLE LINES FROM VALVES 9367A-D TO 9352A-D	17,22	IWC-5222 (a)	875	I	P_{SV} = 700; NOTE 1
30. BORON INJ CHECK VALVES LINE S6-4348-3/4 & SIS PUMP DISCHG TEST LINE S6-2570-3/4	17,18 19	IWC-5222 (a)	2188	I	P_{SV} = 1750
		IWC-5221	INS/FUNCT	P	
31. BORIC ACID RECIRC DWNSTRM 8911 TO AND FROM BIT	18	IWC-5222 (a)	3419	I	P_{SV} = 2735; NOTE 1

DIABLO CANYON POWER PLANT – UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS – CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
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 (8801A,B TO 8820)	18	IWC-5222 (a)	2459*	I	REQUEST FOR RELIEF #5
		IWC-5221	2235	P	TESTED TO CLASS 1 PRESSURE
35. REFUELING WATER STORAGE TANK AND SUPPLY TO FIRST ISO VLVS	18,19 23	IWC-5222 (b)	TANK FILLED	I	NOTE 1
36. RWST SUPPLIES TO CHG PUMPS (8805 TO 8924)	18	IWC-5222 (a)	275	I	P_{SV} = 220
		IWC-5221	INS/FUNCT	P	
37. RWST SUPPLY TO CHG PUMP SUCT (8924 TO CHG PUMP)	14,18	IWC-5222 (a)	275	I	P_{SV} = 220
		IWC-5221	INS/FUNCT	P	
38. SAFETY INJECTION PUMP DISCHARGE/HOT LEG INJECTION PIPING INSIDE	19	IWC-5222 (a)	2459*	I	NO SAFETY VALVE IN SYSTEM – TESTED WITH CLASS 1; REQUEST FOR RELIEF #5
CONT. ISO VALVES (8802A,B)		IWC-5221	2235	P	TESTED WITH CLASS 1
39. RHR COLD LEG INJ PIPING FROM 8809A,B TO CLASS 1	19	IWC-5222 (a)	2459*	I	REQUEST FOR RELIEF #5; NOTE 1

DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
40. RHR COLD LEG INJ PIPING UPSTRM 8809A,B	19,22	IWC-5222 (a)	750	I	P_{SV} = 600; NOTE 1
41. CONTAINMENT RECIRC SUMP OUTLET LINES *-2749 & 2750-14	19	IWC-5222 (c)	-	-	REQUEST FOR RELIEF #7
		IWC-5221	-	-	REQUEST FOR RELIEF #7
42. CONT RECIRC SUMP OUTLET LINES DOWNSTREAM OF VALVES 8982A,B	19	IWC-5222 (a)	563	I	P_{SV} = 450; NOTE 1
43. RHR SUCTION PIPING FROM RWST 8981	19,20	IWC-5222 (a)	563	I	P_{SV} = 450; NOTE 1
44. RHR SUCTION PIPING FROM RWST TO 8981	19	IWC-5222 (a)	275	I	P_{SV} = 220; NOTE 1
45. RHR DISCHG PIPING, SUPPLY TO SIS PUMP SUCTION	19,20	IWC-5222 (a)	750	I	P_{SV} = 600; NOTE 1
46. SAFETY INJECTION PUMPS SUCTION, DISCH, AND TEST LINE TO RWST	18,19	IWC-5222 (a)	275	I	P_{SV} = 220; SEE REQUEST FOR RELIEF #1
		IWC-5221	INS/FUNCT	P	
47. SIS PP RWST SUCTION FROM 8977 TO 8976	19	IWC-5222 (a)	275	I	P_{SV} = 220; NOTE 1

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
48. SIS PP DISCHARGE PIPING TO 8802A,B, 8835	19	IWC-5222 (a)	2188	I	P_{SV} = 1750
		IWC-5221	INS/FUNCT	P	
49. SI COLD LEG INJ DOWNSTREAM OF 8835	19	IWC-5222 (a)	2459 *	I	REQUEST FOR RELIEF #5; NO SAFETY VALVE IN SYSTEM - TESTED WITH CLASS 1
		IWC-5221	2235	P	TESTED WITH CLASS 1
50. RHR HOT LEG INJ TEST LINES TO 8884A-D, 8825, 8885A,B, 8824, 8823	19	IWC-5222 (a)	2459 *	I	REQUEST FOR RELIEF #5; NO SAFETY VALVE IN SYSTEM - TESTED WITH CLASS 1
		IWC-5221	2235	P	TESTED WITH CLASS 1
51. RHR HOT LEG 1 & 2 INJECTION PIPING TO 8703 PLUS BYPASS LINE (8726A,B)	20	IWC-5222 (a)	750	I	P_{SV} = 600; NOTE 1
52. RHR HOT LEG 1 & 2 DOWNSTRM 8703 TO 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

DIABLO CANYON POWER PLANT – UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS – CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
55. RHR PUMP SEAL PIPING	21	IWC-5222 (a)	563	I	P_{SV} = 450; NOTE 1
56. RHR SAMPLE LINES	20,22	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-5222 (a)	325	I	P_{SV} = 260
		IWC-5221	INS/FUNCT	P	
59. RWST SUPPLY TO EDUCTORS	23	IWC-5222 (a)	TANK FILLED	I	RWST
		IWC-5221	INS/FUNCT	P	
60. CONT SPRAY PUMPS, SUCTION PIPING, RWST EDUCTOR SUCTION	23	IWC-5222 (a)	TANK FILLED	I	RWST; REQUEST FOR RELIEF #1
		IWC-5221	INS/FUNCT	P	
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	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2 AND #3
		IWD-5221/5222	INS/FUNCT	P	

DIABLO CANYO. .OWER PLANT – UNIT I
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS – CLASS 2

TABLE 5.2 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
63. CONTAINMENT FAN COOLERS	27,32	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2 AND #3
		IWD-5221/5222	INS/FUNCT	P	
64. REACTOR COOLANT PUMPS CCW SUPPLY & OIL COOLER RETURN CONTAINMENT PENETRATIONS, SPEC K2	29	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2 AND #3
		IWD-5221/5222	INS/FUNCT	P	
65. REACTOR COOLANT PUMPS CCW RETURN CONTAINMENT PENETRATION, LINE K17-1357-6	29	IWD-5223 (a)	3106	I	P_{SV} = 2485; REQUEST FOR RELIEF #3.
		IWD-5221/5222	INS/FUNCT	P	
66. EXCESS LETDOWN HEAT EXCHANGER CCW SUPPLY & RETURN	31	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2 AND #3
		IWD-5221/5222	INS/FUNCT	P	
67. EXCESS LETDOWN HEAT EXCHANGER, SHELL SIDE	31	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2 AND #3
		IWD-5221/5222	INS/FUNCT	P	

DIABLO CANYON POWER PLANT - UNIT I
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 3

TABLE 5.3 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
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
		IWD-5221/5222	INS/FUNCT	P	

DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 3

TABLE 5.3 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
7. COMPONENT COOLING WATER PUMPS	25	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2
		IWD-5221/5222	INS/FUNCT	P	
8. COMPONENT COOLING WATER HEAT EXCHANGERS (SHELL SIDE)	25	IWD-5223 (a)	-	-	REQUEST FOR RELIEF #2
		IWD-5221/5222	INS/FUNCT	P	
9. COMPONENT COOLING WATER SURGE TANK	25	IWD-5223 (a)	38	I	P_{SV} = 30 psig
		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)	-	-	REQUEST FOR RELIEF #2
		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	

DIABLO CANYC POWER PLANT - UNIT I
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 3

TABLE 5.3 SYSTEm PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
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	33,36	IWD-5223 (b)	TANK FILLED	I	REQUEST FOR RELIEF #1; NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS; CONDENSATE STORAGE TANK
		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 PMP 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 PMP DISCH PRESSURE
		IWD-5221/5222	INS/FUNCT	P	
19. CCW HEAT EXCHANGERS SALTWATER OUTLET PIPING	35	IWD-5223 (c)	NONE REQ'D	-	
		IWD-5221/5222	INS/FUNCT	P	REQUEST FOR RELIEF #4

DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 3

TABLE 5.3 SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
20. DIESEL ENGINE JACKET WATER COOLING SYSTEM	37	IWD-5223 (a)	7.5	I	P_{SV} = 6
		IWD-5221/5222	INS/FUNCT	P	

No.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. 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	COMPONENT COOLING WATER SYSTEM	2	62 63 64 66 67	SYSTEM VALVES ARE NOT DESIGNED TO WITHSTAND THE DIFFERENTIAL PRESSURES WHICH WOULD BE DEVELOPED AT THE PRESSURES REQUIRED FOR PERFORMANCE OF THE HYDROSTATIC PRESSURE TESTS.	(1) VISUAL LEAK CHECK DURING NORMAL SYSTEM OPERATION (IWD-5221) (2) ANALYSIS OF WATER CHEMISTRY	EACH INSPECTION PERIOD WEEKLY
		3	7 8 10			

DIABLO CANYC)WER PLANT - UNIT I
TEN YEAR EX. ..NATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF . ROM CODE REQUIREMENTS

TABLE 5.4

SYSTE .ESSURE TEST SUMMARY

No.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. ITEM No.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
3	COMPONENT COOLING WATER PIPING ASSOCIATED WITH CONTAINMENT PENETRATIONS.	2	62 63 64 65 66 67	THE COMPONENTS, PIPING AND VALVES ASSOCIATED WITH CONTAINMENT PENETRATIONS ARE CLASSIFIED CODE CLASS 2. SOLELY ON THE BASIS THAT THEY ARE REQUIRED TO ENSURE CONTAINMENT INTEGRITY. THEY HAVE NO OTHER SAFETY FUNCTION THAT WOULD REQUIRE A CODE CLASS 2 CLASSIFICATION. IN ADDITION TO THE CONTAINMENT ISOLATION FUNCTION, THE PIPING HAS OTHER SAFETY FUNCTIONS WHICH WOULD REQUIRE IT TO BE CODE CLASS 3. ANY TESTING AND INSPECTION OF THESE COMPONENTS, PIPING AND VALVES SHOULD, THEREFORE, BE CONSISTENT WITH THE TESTING AND INSPECTION REQUIREMENTS FOR A CODE CLASS 3 SYSTEM. THIS IS CONSISTENT WITH REVISIONS (WINTER 1979 ADDENDA) OF ASME SECTION XI, SUBSECTION IWA-1300.	THE COMPONENTS, PIPING AND VALVES ASSOCIATED WITH CONTAINMENT PENETRATIONS WILL BE TESTED AND INSPECTED, SUBJECT TO ANY REQUESTS FOR RELIEF, IN ACCORDANCE WITH THE REQUIREMENTS OF ASME SECTION XI, SUBSECTION IWD, 1977 EDITION - SUMMER 1978 ADDENDA	TESTING TO BE AS SPECIFIED UNDER TEST FREQUENCY IN THE SUMMARY.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

No.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. 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. PERIODIC PUMP TESTING WILL VERIFY UNIMPAIRED FLOW THROUGH THE INACCESSIBLE PORTIONS OF THE SYSTEM.	TESTING TO BE AS SPECIFIED UNDER TEST FREQUENCY IN THE SUMMARY. TESTING TO BE AS SPECIFIED IN THE PUMP INSERVICE TESTING PROGRAM.
5	CLASS 2 SAFETY INJECTION, RESIDUAL HEAT REMOVAL, RCP 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.

No.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. ITEM No.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
6	RCP SEAL RETURN PIPING FROM 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 BOUNDARY. 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 TESTING.	NONE	NONE

IN COURSE OF PREPARATION