



**Pacific Gas and
Electric Company**

James R. Becker
Vice President-Diablo Canyon
Operations and Station Director

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

September 7, 2004

805.545.3462
Fax: 805.545.4234

PG&E Letter DCL-04-111

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-275, OL-DPR-80
Diablo Canyon Unit 1
Inservice Inspection Report for Unit 1 Twelfth Refueling Outage

Dear Commissioners and Staff:

In accordance with ASME Section XI, paragraph IWA 6230, enclosed is the Diablo Canyon Inservice Inspection Report. This report provides the results of the Unit 1 Twelfth Refueling Outage Inservice Inspections of Class 1 and 2 components and supports.

Sincerely,

James R. Becker

ddm/469/R0237144

cc/enc: Bruce S. Mallett
David L. Proux
Girija S. Shukla
State of California, Pressure Vessel Unit
cc: Diablo Distribution

A047

Enclosure
PG&E Letter DCL-04-111

**INSERVICE INSPECTION REPORT FOR
DCPP UNIT 1 TWELFTH REFUELING OUTAGE**

Diablo Canyon Power Plant

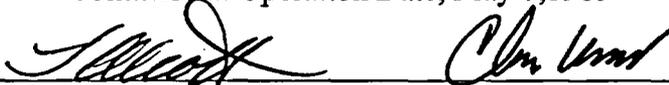
Unit 1

USNRC Docket No. 50-275

Operating License No. DPR-80

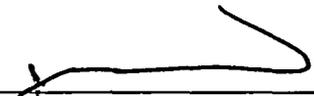
Commercial Operation Date, May 7, 1985

Prepared By:



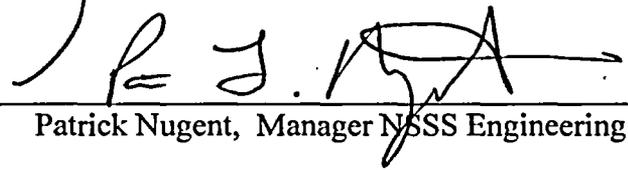
Thomas L. Alcott and Chris Beard, ISI Specialists

Reviewed By:



James Hill, Lead ISI Specialist

Approved By:



Patrick Nugent, Manager NSSS Engineering

This report is submitted as required by ASME Boiler and Pressure Vessel Code, Section XI, to the United States Nuclear Regulatory Commission.

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>
A.	Introduction
B.	ASME Code Data Report Form NIS-1 (Basis of Summary)
	1. Class 1
	2. Class 2
C.	Class 1 Components
	1. Vessels
	a. Reactor Vessel
	b. Steam Generators
	2. Piping
	3. Integral Attachments
	4. Supports
D.	Class 2 Components
	1. Vessels
	a. Steam Generators
	2. Piping
	3. Integral Attachments
	4. Supports
E.	System Pressure Tests
F.	Preservice Inspection Items
G.	Repairs and Replacements
	1. ASME Code Data Report Form NIS-2 (Indexed by System)
H.	Containment Examinations
I.	Augmented Examinations

SECTION A
INTRODUCTION

SECTION A

INTRODUCTION

Inservice inspection (ISI) of scheduled ASME Section XI Class 1 and 2 components and their supports at Pacific Gas and Electric Company's Diablo Canyon Power Plant (DCPP) Unit 1 was completed during the twelfth refueling outage from March through May, 2004. The DCPP Unit 1 twelfth refueling outage (1R12) was the first outage in the third period within the second 10-year ISI interval.

In addition to the ASME Code examinations reported here, a 100% bare metal examination was conducted on the reactor vessel top head penetration nozzles. The reactor bottom head penetration nozzles also received a visual examination. No evidence of boric acid leakage was found. Regional NRC staff reviewed these examinations, and results are on file at the plant site.

This report is submitted as required by ASME Section XI, paragraph IWA-6220, and is organized in several sections. An introduction is provided in Section A. Section B contains the completed ASME Code Data Report Form NIS-1 for Class 1 and 2 components. Sections C and D detail the Class 1 and 2 examinations performed, date of examination (for group items or for more than one type of examination performed, the date provided is the most recent examination date), any unusual conditions noted, corrective actions if required, and explanatory remarks.

System pressure tests on Class 1 and 2 systems conducted during the period following 1R11, and up to and including 1R12, are reported in Section E.

Preservice inspections were performed on certain components, as required after repairs or replacements. These items are detailed in Section F.

Section G of this report, Repairs and Replacements, contains the completed ASME Code Data Report Form NIS-2 for those 1R12 work packages closed prior to July 8, 2004 and for any pre-1R12 work packages closed after July 1, 2002. NIS-2 reports for 1R12 work packages that are closed after July 7, 2004 will be included in the next outage report. Corrective actions and work order package documentation are on file at DCPP and are referenced by work order number in the NIS-2 reports.

Containment exams are reported in Section H.

Augmented exams are reported in Section I.

SECTION B

ASME CODE DATA NIS-1 FORMS

FORM NIS-1 OWNER'S DATA REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Pacific Gas & Electric Company, 77 Beale St., San Francisco, CA 94106
2. Plant Diablo Canyon Power Plant, P.O. Box 56, Avila Beach, CA 93424
3. Plant Unit One 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 05/07/85 6. National Board Number for Unit N/A
7. Component Inspected ASME Code Class 1 Items

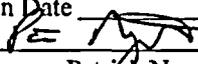
Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Combustion Engineering Westinghouse	CE 66104	11475-76	20760
Reactor Vessel Head	Combustion Engineering Westinghouse	CE 66204	11475-76	20760
Steam Gen 1-1	Westinghouse	1041	N/A	68-12
Steam Gen 1-2	Westinghouse	1042	N/A	68-13
Steam Gen 1-3	Westinghouse	1043	N/A	68-14
Steam Gen 1-4	Westinghouse	1044	N/A	68-15
Pressurizer	Westinghouse	1051	N/A	68-30
Reactor Coolant Pump 1-2	Westinghouse	507	N/A	N/A
Class 1 Valves	Various	N/A	N/A	N/A
Class 1 Supports	Various	N/A	N/A	N/A
Class 1 Piping	Wismer & Becker/Kellog	N/A	N/A	N/A

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-1 (back)

- 8. Examination Dates 03/04 to 05/04
- 9. Inspection Period Identification: Third (11th to 12th)
- 10. Inspection Interval Identification: Second
- 11. Applicable Edition of Section XI 1989 Addenda None
- 12. Date/Revision of Inspection Plan: December 2002, Revision 2
- 13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for current interval. Refer to ISI Report
- 14. Abstract of Results of Examinations and Tests. Refer to ISI Report
- 12. Abstract of Corrective Measures. Refer to ISI Report

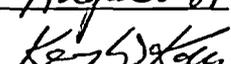
We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) _____ Expiration Date _____
Date AUGUST 31 20 04 Signed Engineering Manager By 
Owner Patrick Nugent

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of California and employed by H. S. B. I. & I. Co. of Harford, CT have inspected the components described in this Owners' Data Report during the period 03/04 to 05/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date August 31 2004
 Commissions CA 1828, NB 9990 A.N.I.C.
Inspector's Signature/Kenny Kim National Board, State, Province and No.

FORM NIS-1 (back)

- 8. Examination Dates 03/04 to 05/04
- 9. Inspection Period Identification: Third (11th to 12th)
- 10. Inspection Interval Identification: Second
- 11. Applicable Edition of Section XI 1989 Addenda None
- 12. Date/Revision of Inspection Plan: December 2002, Revision 2
- 13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for current interval. Refer to ISI Report
- 14. Abstract of Results of Examinations and Tests. Refer to ISI Report
- 12. Abstract of Corrective Measures. Refer to ISI Report

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) _____ Expiration Date _____
Date AUGUST 31 2004 Signed Engineering Manager By Patrick Nugent
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of California and employed by H. S. B. I. & I. Co. of Harford, CT have inspected the components described in this Owners' Data Report during the period 03/04 to 05/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date August 31 2004

Kenny Kim Commissions CA 1828, NB 9990 A.N.I.C.
Inspector's Signature/Kenny Kim National Board, State, Province and No.

SECTION C
CLASS ONE COMPONENTS

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: REACTOR VESSEL

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 1 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-A							
B1.22	Head Welds - Meridional	RPV 1 Closure Hd	1-446E	UT	4-7-04		NRI
	Head Welds - Meridional	RPV 1 Closure Hd	1-446F	UT	4-7-04		NRI
B1.40	Head to Flange Weld (1/3)	RPV 1 Closure Hd	6-446A	MT	4-5-04		NRI
	Head to Flange Weld (1/3)	RPV 1 Closure Hd	6-446A	UT	4-5-04		NRI
B-G-1							
B6.10	RPV1 Closure Head Nuts	RPV Bolting > 2" diam.	RPV1 Nuts 37 to 54	MT	4-13-04	RI - Nut #50, A0605797, Refer to System-07 NIS-2 for Repair	NRI
Additional Exams	RPV1 Closure Head Nuts	RPV Bolting > 2" diam.	RPV1 Nuts 1 to 36	MT	4-15-04	RI - Nuts: 1, 9, 18, 30, & 32, A0605797, Refer to System-07 NIS-2 for Repair	NRI
B6.30	RPV1 Closure Hd Studs	RPV Bolting > 2" diam.	RPV1 Studs 37 to 54	MT	4-13-04		NRI
	RPV1 Closure Hd Studs	RPV Bolting > 2" diam.	RPV1 Studs 37 to 54	UT	4-13-04		NRI
B6.50	RPV1 Closure Washers	RPV Bolting > 2" diam.	RPV1 Washer 37 to 54	VT-1	4-13-04		NRI

 SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: REACTOR VESSEL

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 2 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-O							
B14.10	RPV1: Welds in CRD Housing	RV1 CRDM E-3	RV1 CRDM 56 Weld	PT	3-31-04		NRI
	RPV1: Welds in CRD Housing	RV1 CRDM C-5	RV1 CRDM 57 Weld	PT	3-31-04		NRI
	RPV1: Welds in CRD Housing	RV1 CRDM C-3	RV1 CRDM 73 Weld	PT	3-31-04		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: STEAM GENERATORS

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 1 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-B							
B2.40	Tubesheet to Head Weld (1/3)	Steam Gen. 1-1	Channel W 1-1 one third	UT	4-26-04		NRI

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: STEAM GENERATORS

ASME SECTION XI SYSTEMS - CLASS 1

CAT B16.20

STEAM GENERATOR TUBING

PAGE 2 of 2

The following percentages apply to inservice tubes.

SCOPE	PROBE TYPE	SG 1-1	SG 1-2	SG 1-3	SG 1-4
Full length (except Rows 1 and 2 U-bends)	Bobbin	100%	100%	100%	100%
Rows 1 and 2 U-bends	Plus Point	100%	100%	100%	100%
Rows 13 to 17 U-bends	Plus Point	20%	20%	20%	20%
Repeat PWSCC indications at dents and top of tubesheet	Plus Point	100%	100%	100%	100%
Hot Leg top-of tubesheet	Plus Point	100%	100%	100%	100%
≥ 5 volt dented TSP intersections	Plus Point (Note 1)	100% at 1H to 4H 20% at 5H to 7H	100% at 1H to 7C 20% at 6C	20% at 1H to 7H	100% at 1H to 6H 20% at 7H
> 2 and < 5 volt dented TSP intersections	Plus Point (Note 1)	100% at 1H to 4H 20% at 5H	100% at 1H to 7C 20% at 6C	20% at 1H	100% at 1H to 6H 20% at 7H
> 0.21 volt and ≤ 2 volt dented TSP intersections	Plus Point (Note 1)	100% 1H 20% 2H	NA	NA	NA
Distorted OD bobbin signals (DOS) at TSP intersections	Plus Point	100% of DOS greater than 1.4 bobbin volts	100% of DOS greater than 1.4 bobbin volts	100% of DOS greater than or equal to 1.7 bobbin volts	100% of DOS greater than or equal to 1.7 bobbin volts
Distorted ID bobbin signals (DIS) at TSP intersections	Plus Point	100%	100%	100%	100%
≥ 5 volt free span dings	Plus Point	100%	100%	100%	100%
Baseline TSP ligament indications	Plus Point	100%	100%	100%	100%
Tubes plugged		29	91	10	10

Note 1: For each 20% sample, inspect at least 50 dents, or else inspect 100% if there are less than 50 dents.

 SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: Pumps, Piping

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 1 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-G-1							
B6.180	Pump Bolting > 2" diam.	RCP 1-2 Main Flange Bolts	RCP 1-2 Bolts 10-17	UT	4-1-04		NRI
B-G-2							
B7.50	Pipe Bolting < 2" diam.	S6-727-6	RV-8010C Inlet Flg 12 Studs & Nuts	VT-1	4-19-04		NRI
	Pipe Bolting < 2" diam.	S6-56-1.5	(WIB-991/WIB-992) 4 Studs & Nuts	VT-1	4-17-04		NRI
	Pipe Bolting < 2" diam.	S6-57-1.5	(WIB-1004/WIB- 1005) 4 Studs-Nuts	VT-1	4-17-04		NRI
B7.70	Pipe Bolting < 2" diam.	S6-254-10SPL+	V-8948B: 16 Studs & Nuts	VT-1	4-17-04		NRI
	Pipe Bolting < 2" diam.	S6-255-10SPL+	V-8948C: 16 Studs & Nuts	VT-1	4-17-04		NRI
	Pipe Bolting < 2" diam.	S6-256-10SPL+	V-8948D: 16 Studs & Nuts	VT-1	4-17-04		NRI
	Pipe Bolting < 2" diam.	S6-2576-8	V-8740B: 16 Studs & Nuts	VT-1	4-17-04		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: Pumps, Piping

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 2 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-J	See RI-ISI						
B-L-1							
B12.10	RCP 1-2: Pump Casing Weld	RCP 1-2 Girth Weld	RCP 1-2 Girth Weld	VT-1	4-21-04	Code Case N-481. VT-2 exam performed with system pressure test. WCAP-13044 and WCAP- 13045 demonstrate compliance to Code Case N- 481 for Westinghouse primary loop pump casings.	NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: Piping

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 1 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
RI-ISI							
	RC Out Lp 2: Pipe Welds > 4" diam	*2-29SPL	WIB-RC-2-2	UT	4-15-04	Substituted for WIB-RC-2-9 (One Sided Exam)	NRI
	RC Pp Dis Lp 2: Pipe Welds > 4" diam	*10-27.5SPL	WIB-RC-2-17	UT	4-16-04	Substituted for WIB-RC-2-10 (One Sided Exam)	NRI
	Lp 2 xover Stub: Pipe Welds < 4" diam	S6-1147-3SPL	WIB-89A	UT	4-14-04		NRI
	Chg Line Lp 3: Pipe Welds < 4" diam	S6-50-3SPL	WIB-221	UT	4-09-04		NRI
	Chg Line Lp 3: Pipe Welds < 4" diam	S6-50-3SPL	WIB-222	UT	4-09-04		NRI
	Chg Line Lp 3: Pipe Welds < 4" diam	S6-50-3SPL	WIB-223	UT	4-09-04		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: Piping

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 2 of 2

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
RI-ISI							
	Accumulator Inj. Loop-1	S6-253-10SPL	WIB-42	UT	04-15-04		NRI
	Pzr Pwr RV PCV-456	S6-1195-3SPL	WIB-446	UT	03-31-04	Substituted for WIB-445 (One Sided Exam)	NRI
	Pzr Pwr RV PCV-456	S6-1195-3SPL	WIB-449	UT	03-31-04		NRI
	Pzr Pwr RV PCV-456	S6-1195-3SPL	WIB-447	UT	03-31-04	Substituted for WIB-454 (Access)	NRI
	HL Recirc before V-8702	S6-109-14SPL	WIB-230	UT	04/02/04		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: INTEGRAL
ATTACHMENTS

ASME SECTION XI SYSTEMS - CLASS 1

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-K-1							
B10.10	Accumulator Injection Lp 3	S6-255-10SPL	57N-4V Paramount	PT	4-23-04		NRI
	RHR Pp 1-1 Inj Cold Leg 2	S6-3845-6SPL	42-44V Paramount	PT	4-01-04		NRI
	RHR Pp 1-2 Inj Cold Leg 4	S6-3847-6SPL	58N-60R X309A-H	PT	4-25-04		NRI
B10.20	RC Pump 1-2	RCP 1-2 Support Lug	Lug Weld No. 3	PT	4-21-04		NRI

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT
 (IR12)
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING SUPPORTS

CATEGORY

F-A

SUPPORTS

F1.10 TO F1.70

SUPPORT COMPONENTS

The required inservice inspections were performed on 74 Class 1 hangers during the twelfth refueling outage between the dates of 07/02/02 and 07/07/04. All supports found acceptable. Data reports are on file.

LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT
16	10-13SL	56	22-289SL	15	11-144R	51	2152-9	1992	2169-32
109	12-3SL	1991	22-410SL	15	43-10CS	51	2152-17		
109	12-144SL	1993	22-545SL	15	48-22CS	51	2180-18		
109	12-226SL	1994	22-411SL	15	11-150R	51	2152-12		
255	12-139SL	2576-8	40-29R	30	56N-132V	51	2152-18		
2575	10-34SL	236	10-30R	1995	12-102R	51	2152-63		
2576	10-26SL	236	10-87R	1995	57N-102V	959	2169-42		
237	12-137SL	236	10-133R	24	52-9V	1992	2169-21		
3846	13-7SL	3845	42-44V	24	52-41R	1992	2169-33		
3846	13-9SL	3845	42-42V	1172	11-148R	1992	2182-43		
13	11-105SL	3845	42-54V	1172	11-149R	1992	2169-22		
13	11-110SL	14	52-16R	51	2152-13	1992	2169-34		
1171	11-154SL	14	52-17R	51	2180-15	1992	2182-42		
1171	11-155SL	14	11-137R	51	43-3R	1992	2156-67		
1172	11-131SL	14	52-36V	51	2180-16	1992	2156-85		
1195	11-94SL	15	42-4V	51	181-28	1992	2169-19		
1195	11-126SL	15	11-100R	51	2152-15	1992	2169-23		
1195	11-132SL	15	42-64V	51	43-2R	1992	2182-45		

SECTION D
CLASS TWO COMPONENTS

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: STEAM GENERATORS

ASME SECTION XI SYSTEMS - CLASS 2

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
C-A							
C1.10	Shell Circ. Welds	Steam Generator 1-3	Girth W3-5 accessible 20%	UT	4-5-04		NRI
C1.20	Head Circ. Welds	Steam Generator 1-4	Girth W4-7 accessible 20%	UT	4-7-04		NRI
C1.30	Tubesheet-to- Shell Weld	Steam Generator 1-1	Girth W1-2 - one third	UT	4-26-04		NRI
C-B							
C2.21	Nozzle-to-Shell Weld	SG 1-4 to K15-225-28V	Main Steam Nozzle- to-Head Weld	UT	4-7-04		NRI
	Nozzle-to-Shell Weld	SG 1-4 to K15-225-28V	Main Steam Nozzle- to-Head Weld	MT	4-7-04		NRI
C2.22	Nozzle Inside Radius Section	SG 1-4 to K15-225-28V	Main Steam Nozzle Inside Radius	UT	4-7-04		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: PIPING

ASME SECTION XI SYSTEMS - CLASS 2

PAGE 1 of 1

CATEGORY	COMPONENT /	WELD OR	EXAM	EXAM			
ITEM	DESCRIPTION	LINE	COMPONENT NO.	TYPE	DATE	COMMENTS	RESULTS
C-F-1	See RI-ISI						
C-F-2	See RI-ISI						

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: PIPING

ASME SECTION XI SYSTEMS - CLASS 2

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
RI-ISI							
	RHR Injection to Hot Leg 1&2	S1-985-12IIIP	WIC-95	UT	3-18-04	Previous Record RI. Tracking	RI
	Steam Gen 1-1 Feed Wtr Sup	K16-554-16V	WICG94-1B	UT	4-23-04		NRI
	Steam Gen 1-1 Feed Wtr Sup	K16-554-16V	WICG94-1C	UT	4-23-04		NRI
	RWST Out Hdr	S2-221-18	RB-221-7	UT	4-2-04	Substituted for RB-221-4	NRI
	Containment Spray Wtr Supply	S2-261-12	RB-261-14	UT	3-24-04	Substituted for RB-222-13	NRI
	Containment Spray Wtr Supply	S2-261-12	RB-261-15	UT	3-24-04	Substituted for RB-222-14	NRI
	Containment Spray Wtr Supply	S2-261-12	RB-261-4	UT	3-24-04		NRI
	Containment Spray Wtr Supply	S2-261-12	RB-261-19	UT	3-24-04		NRI

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: INTEGRAL ATTACHMENTS

ASME SECTION XI SYSTEMS - CLASS 2

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
C-C							
C3.20	Steam Gen Steam Outlet 1-3	Line K15-226- 28V	1026-1V Attachment Lugs	MT	4-15-04		NRI
	Steam Gen Steam Outlet 1-4	Line K15-225- 28V	1028-1V Attachment Lugs	MT	4-15-04		NRI
	Stm Gen FW Supply 1-2	Line K16-555- 16V	1039-9V Attachment Paramount	MT	4-15-04		NRI
	Stm Gen FW Supply 1-3	Line K16-557- 16V	1042-9V Attachment Paramount	MT	4-15-04		NRI

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT
 (IR12)
 ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: PIPING SUPPORTS

CATEGORY

F-A SUPPORTS

F1.10 TO F1.70 SUPPORT COMPONENTS

The required inservice inspections were performed on 37 Class 2 hangers prior to and during the twelfth refueling outage between the dates of 07/02/02 and 07/07/04. Results were found acceptable. Data reports are on file.

LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT
985	10-18SL	225	1033-4SL	3551	288-11R				
985	10-19SL	225	1033-6SL	110	55S-90A				
985	10-39SL	225	1033-2SL	110	57S-21V				
985	10-35SL	1065	1033-15SL	110	72-13V				
508	11-37SL	1066	1033-16SL	512	54S-28R				
508	11-36SL	1066	1033-28SL	985	40-47R				
508	11-35SL	557	1049-1SL	985	40-59R				
2576	10-33SL	556	1049-4SL						
2576	10-132SL	556	1049-5SL						
57	22-452SL	985	56N-28R						
57	22-488SL	985	56N-78R						
226	1030-16SL	985	56N-79R						
226	1033-3SL	508	58N-49R						
226	1033-5SL	508	58N-52A						
225	1031-2SL	508	42-51R						

SECTION E

SYSTEM PRESSURE TESTS

End of 2nd Interval System Hydrostatic Test
Performed at NOP IAW Code Case N-498-1

PG&E

DIABLO CANYON POWER PLANT -
UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 1 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
1	1	Reactor Coolant System and Connected Piping	5-18-04	STP-R8A	NRI
2	1	Excess Letdown between 8166 & 8167	5-18-04	STP-R8A	NRI
3	1	Pressurizer Auxiliary spray	5-18-04	STP-R8A	NRI
4	1	Alternate Charging	5-18-04	STP-R8A	NRI
5	1	RHR & SI to Cold Legs	5-18-04	End of Interval Exam, STP-R8A	NRI
6	1	Charging Injection Inside Cont.	5-18-04	STP-R8A	NRI
7	1	Safety Injection Inside Cont, From 8905A-D to 8949A-D	5-18-04	End of Interval Exam, ISI P-SI-22	NRI
8	1	RHR Between 8702 & 8701	5-18-04	STP-R8A	NRI

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 2 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
2	2	Auxiliary Feedwater Pumps X-2 & X-3	5-26-04	End of Interval Exam	NRI
3	2	Auxiliary Feedwater Pump X-1 Discharge	6-9-04	End of Interval Exam	NRI
8	2	Charging Pumps Discharge Piping	5-26-04	End of Interval Exam	NRI
11	2	Charging Injection 8803A & B to 8801 A & B	4-26-04	End of Interval Exam	NRI
14	2	Regenerative HX and Letdown Piping	5-26-04	End of Interval Exam	NRI
17	2	Accumulator Injection Loops 1-4, Sample Lines t 9352A-D, Test & Fill lines to 8878A-D	5-18-04	End of Interval Exam	NRI
18	2	Accumulator, RHR & Charging Test Lines	5-11-04	End of Interval Exam	NRI
20	2	RWST Supply to Chg PP Suction, 8805A & B to 8924	3-24-04	End of Interval Exam	NRI
21	2	Safety Injection Pump Discharge to 8802A & B and Cold Legs	5-18-04	End of Interval Exam	NRI
22	2	Safety Injection Pumps Discharge to Hot Legs from 8802A & B to 8904A-D	5-18-04	End of Interval Exam	NRI

PG&E

DIABLO CANYON POWER PLANT -
UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 3 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
24	2	RHR Hot Leg Injection from 8703 to 8740 A & B	12-05-02	End of Interval Exam, ISI P-RHR-24	NRI
26	2	RWST Supply to Eductors	5-08-04	End of Interval Exam, V-311	NRI
27	2	Containment Spray Pump Discharge Piping to 9015A & B	4-23-04	End of Interval Exam, STP M-86H, STP P-CSP-A2	NRI
28	2	Containment Spray Pump Discharge Piping from 9015A & B to 9006A & B	4-23-04	End of Interval Exam, STP M-86H, STP P-CSP-A2	NRI
30	2	CCW Supply & Return to Cont Fan Coolers, RCPs and XS Letdown Heat Exchanger	5-13-04	End of Interval Exam	NRI
31	2	Steam Generator Nitrogen Supply	5-03-04	End of Interval Exam	NRI
32	2	RX Vessel Level Indication and Vent System	5-18-04	End of Interval Exam, R8A	NRI
35	2	Primary Water Supply to PZR Relief Tank (pen 52)	5-13-04	End of Interval Exam	NRI
38	2	Fuel Transfer Tube to Refueling Canal	5-01-04	End of Interval Exam (Relief Request PRS-4, R1 Not Used)	NRI
44	2	Inside Cont Instrument Air Supply Header (pen 52)	4-15-04	End of Interval Exam	NRI

PG&E

DIABLO CANYON POWER PLANT -
UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 4 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
45	2	Service Air Penetration Header (pen 52)	4-15-04	End of Interval Exam	NRI

SECTION F
PRESERVICE INSPECTION ITEMS

 SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: PSI

ASME SECTION XI SYSTEMS – CLASS 1 & 2 PRESERVICE INSPECTION ITEMS

 PAGE 1 of 1

The required preservice inspections were performed on 9 components and 7 supports during the twelfth refueling outage.

CATEGORY	Name of Component	System	Exam Type	Work Order No.	Other Ident. Line No
B-G-1					
	RPV Nuts 1,9,18, 30, 32, 50	7	PT	C0188286	RPV Nuts
B-G-2					
	RCS-1-8033A (12 Studs & Nuts)	7	VT-1	C0184826	14
	RCS-1-8033B (12 Studs & Nuts)	7	VT-1	C0184892	14
	RCS-1-8010A	7	VT-1	R0233714	729
	RCS-1-8010B	7	VT-1	R0233716	728
	RCS-1-8010C	7	VT-1	R0233717	727
	SG 1-4 PMW Bolt	4	VT-1	C0188365	SG 1-4
B-J					
	WIB-337	7	PT	C0188753	727
E-A					
	Containment Liner Nelson Studs	45	VT-3	C0184590	Containment Structure
F-A					
	22-212SL	8	VT-3	C0182773	54
	48-17R	7	VT-3	C0188604	727
	11-14SL	7	VT-3	C0188398	1171
	11-136SL	7	VT-3	C0182767	14
	11-81SL	9	VT-3	C0182727	3845
	2156-81	9	VT-3	C0188295	1992
	11-18SL	7	VT-3	C0182703	14

SECTION G
REPAIRS AND REPLACEMENTS

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Feedwater System (03)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
FW-1-379	Velan Valve	0403	N/A	R0224250	571	N/A	Replaced (20)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (20) Replaced Disc

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Feedwater System (03)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
1048-1R	PG&E	N/A	N/A	C0178556	554	N/A	Replaced (19)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (19) Removed/Reinstalled Parts By Welding

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004, Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Turbine Steam Supply System (04)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
MS-1-FCV-38	Velan Valve	NF	N/A	C0176933	594	N/A	Replaced (5)	<input type="checkbox"/>	Yes
MS-1-2015	Anchor Darling	0480-1/71	N/A	C0185674	727	N/A	Replaced (5)	<input type="checkbox"/>	No
S/G 1-1	Westinghouse	1041	68-12	C0185792	SG1-1	1968	Replaced (21)	<input type="checkbox"/>	Yes
S/G 1-2	Westinghouse	1042	68-13	C0188362	SG1-2		Replaced (2)	<input type="checkbox"/>	Yes
S/G 1-4	Westinghouse	1044	68-15	C0188425	SG1-4		Replaced (2)	<input type="checkbox"/>	Yes

7. Description of Work (21) Removed Tube, Installed Welded Plug (5) Replaced Bonnet Bolting (2) Replaced Hand Hole Bolting

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed [Signature] Engineering Manager 8/31/04
 (Owner or Owner's Designee) Patrick Nugent (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
[Signature] Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
Kenny D. Kim (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Turbine Steam Supply System (04)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
3-31R	PG&E	N/A	N/A	C0178773	593	N/A	Replaced (17)	<input type="checkbox"/>	No
3-34R	PG&E	N/A	N/A	C0178774	593	N/A	Replaced (17)	<input type="checkbox"/>	No
10-113SL	Pacific Scientific	446	N/A	C0182702	1040	N/A	Replaced (10)	<input type="checkbox"/>	Yes
12-66SL	Pacific Scientific	1552	N/A	C0182706	1020	N/A	Replaced (10)	<input type="checkbox"/>	Yes
10-20SL	Pacific Scientific	675	N/A	C0182715	1041	N/A	Replaced (10)	<input type="checkbox"/>	No

7. Description of Work (17) Modified Support (10) Replaced Snubber

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner Repair Org. P.O. No., Job No., etc.
See Above

4. Identification of System Reactor Coolant System (07)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
RCS-1-RV-8010C	Crosby Valve	U1A	N/A	C0178168	727	Unk	Replaced (4)	<input checked="" type="checkbox"/>	Yes
RCS-0-RV-8010	Crosby Valve	U2C	N/A	C0178203	Stock	Unk	Replaced (20)	<input type="checkbox"/>	Yes
RCS-1-8033A	Velan Valve	NF	N/A	C0184829	14	N/A	Replaced (5)	<input type="checkbox"/>	Yes
RCS-1-8033B	Velan Valve	NF	N/A	C0184892	14	N/A	Replaced (5)	<input type="checkbox"/>	Yes
Rx Vessel 1-1	Combustion Eng.	CE66104	20760	C0188154	Rx Vessel 1-1	1970	Replaced (24)	<input checked="" type="checkbox"/>	Yes

7. Description of Work (4) Replaced Valve (5) Replaced Bonnet Bolting (20) Replaced Disc
(24) Replaced CETNA Drive Sleeve

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Repair / Replacement conforms to Section XI of the ASME Code. Signed Patrick Nggent Engineering Manager 7/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Repair / Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Reactor Coolant System (07)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
11-18SL	Pacific Scientific	16987	N/A	C0182703	14	N/A	Replaced (10)	<input type="checkbox"/>	Yes
11-136SL	Pacific Scientific	2767	N/A	C0182767	14	N/A	Replaced (10)	<input type="checkbox"/>	Yes
11-14SL	Pacific Scientific	23083	N/A	C0188398	1171	N/A	Replaced (26)	<input type="checkbox"/>	Yes
11-14SL	Pacific Scientific	23803	N/A	C0188471	1171	N/A	Replaced (27)	<input type="checkbox"/>	Yes
48-17R	PGE	N/A	N/A	C0188604	727	N/A	Replaced (17)	<input type="checkbox"/>	No

7. Description of Work (10) Replaced Snubber (17) Modified Support
(26) Replaced U-Bolt (27) Added Shim Plate By Welding

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner Repair Org. P.O. No., Job No., etc.
See Above

4. Identification of System Chemical and Volume Control System (08)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
CVCS-1-8479B	Anchor Darling	961048-1	N/A	C0178787	1468	N/A	Replaced (3)	<input type="checkbox"/>	No
CCP 1-1	Pacific Pumps	45612	N/A	C0181060	CCP 1-1	N/A	Replaced (26)	<input type="checkbox"/>	Yes
CVCS-1-8387B	Velan Valve	EB312-1-4	N/A	C0183811	1474	N/A	Replaced (4)	<input checked="" type="checkbox"/>	Yes
CVCS-1-8387C	Velan Valve	EB312-1-2	N/A	C0183930	1475	N/A	Replaced (4)	<input checked="" type="checkbox"/>	Yes
CVCS-1-8387C	Velan Valve	EB312-1-2	N/A	C0183930	1475	N/A	Replaced (27)	<input checked="" type="checkbox"/>	Yes

7. Description of Work (3) Replaced Valve Internals (4) Replaced Valve
(26) Replaced Outboard and Inboard Seal Plates (27) Replaced Reducing Inserts

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed *Patrick Nugent* Engineering Manager 8/31/04
(Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
(Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Chemical and Volume Control System (08)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
22-212SL	Pacific Scientific	23101	N/A	C0182773	54	N/A	Replaced (10)	<input type="checkbox"/>	Yes
73-82	PG&E	N/A	N/A	C0188862	1468	N/A	Replaced (32)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (10) Replaced Snubber
(32) Deleted Pipe Support

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed *Patrick Nigent* Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2
2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424
3. Work Performed by Owner Repair Org. P.O. No., Job No., etc. _____
See Above
4. Identification of System Safety Injection System (09)
5. (a) Applicable Construction Code (See Work Order) 19 Edition _____ Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
SI-1-8805A	Anchor Darling	6820-2-13	N/A	C0174231	1987	N/A	Replaced (5)	<input type="checkbox"/>	Yes
SI-1-241	Contromatics	N/A	N/A	C0179410	3136	N/A	Replaced (29)	<input checked="" type="checkbox"/>	No
Spool Piece	PG&E	N/A	N/A	C0182524	3136	N/A	Replaced (30)	<input checked="" type="checkbox"/>	No
SI-1-8821A	Velan Valve	51	N/A	C0188201	3849	N/A	Replaced (31)	<input type="checkbox"/>	Yes
SI-1-8821B	Velan Valve	25	N/A	C0188201	3850	N/A	Replaced (31)	<input type="checkbox"/>	Yes

7. Description of Work (5) Replaced Bonnet Bolting
(29) Replaced Valve with Blind Flange (30) Installed Temporary Spool Piece (31) Welded Threaded Yoke to Press. Boundary (Bonnet)
8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1
9. Remarks *** Pressure Test: Section XI Boundary Change Periodic Pressure Test IAW Coded Case N-498-1 at NOP.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/3/04
 (Owner or Owner's Designee) _____ (Title) _____ (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) _____ (Date) _____ (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2
2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424
3. Work Performed by Owner Repair Org. P.O. No., Job No., etc. _____
See Above
4. Identification of System Safety Injection System (09)
5. (a) Applicable Construction Code (See Work Order) 19 Edition _____ Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
11-81SL	Pacific Scientific	304	N/A	C0182727	3845	N/A	Replaced (10)	<input type="checkbox"/>	No
56-13	PG&E	N/A	N/A	C0188291	1994	N/A	Replaced (17)	<input type="checkbox"/>	No
2156-109	PG&E	N/A	N/A	C0188293	1991	N/A	Replaced (32)	<input type="checkbox"/>	No
2156-81	PG&E	N/A	N/A	C0188295	1992	N/A	Replaced (17)	<input type="checkbox"/>	No
56-26	PG&E	N/A	N/A	C0188299	1994	N/A	Replaced (17)	<input type="checkbox"/>	No

7. Description of Work (10) Replaced Snubber (17) Modified Support
(32) Deleted Support
8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1
9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed _____ Engineering Manager 8/31/04
 (Owner or Owner's Designee) Patrick Nugent (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 20 04 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Component Cooling Water System (14)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
CCW-1-585	Crane Nuclear	D0649	N/A	C0175757	180	N/A	Replaced (4)	<input checked="" type="checkbox"/>	Yes
Line-3291	PG&E	N/A	N/A	C0188624	3291	N/A	Replaced (33)	<input checked="" type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (4) Replaced Valve
(32) Cut and Rewelded to Restore Alignment Using New Material

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed *Patrick Nugent* Engineering Manager 7/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Component Cooling Water System (14)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
63-28R	PG&E	N/A	N/A	C0188586	3291	N/A	Replaced (9)	<input type="checkbox"/>	No
57N-60R	PG&E	N/A	N/A	C0188587	3291	N/A	Replaced (9)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (9) Replaced Support Parts

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed *Patrick Nugent* Engineering Manager 8/31/07
 (Owner or Owner's Designee) Patrick Nugent (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 Kenny D. Kim (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Liquid Radwaste System (19)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
LWS-1-FCV-501	Contromatics, Inc	NF	N/A	R0227773	749	N/A	Replaced (3)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (3) Replaced Valve Internals

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Liquid Radwaste System (19)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
2161-56	PG&E	N/A	N/A	C0188233	749	N/A	Replaced (17)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (17) Modified Support

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/3/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Containment Structure (45)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
6E	General Electric	6.343.315	N/A	C0184590	N/A	N/A	Replaced (34)	<input type="checkbox"/>	Yes
6E	General Electric	6.343.315	N/A	C0184810	N/A	N/A	Replaced (35)	<input type="checkbox"/>	Yes
6E	General Electric	6.343.315	N/A	C0184811	N/A	N/A	Replaced (36)	<input type="checkbox"/>	Yes
MP63	PG&E	NF	N/A	C0177589	647	N/A	Replaced (6)	<input type="checkbox"/>	No
								<input type="checkbox"/>	

7. Description of Work (6) Replaced Flange Bolting
(34) Added Weld Attachments to Containment Liner (35) Installed GE Enclosure Ring (36) Installed Conax Penetration

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other _____
 Pressure _____ PSIG Test Temp. _____ °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nugent Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Low Level Measurement(48)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
Reactor Vessel Seal Table (Unit-1)	Westinghouse	N/A	N/A	C0187978	N/A	N/A	Replaced (36)	<input checked="" type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (36) Shorten Incore Flux Thimbles E-5, E-9, F-8, H-13, H-15, N-4, and N-14

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed Patrick Nuger Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 20 04 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT
As Required by the Provisions of ASME Code Section XI

1. Owner Pacific Gas and Electric Company Date July 7, 2004
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit 1
P.O. Box 56, Avila Beach, CA 93424

3. Work Performed by Owner
See Above Repair Org. P.O. No., Job No., etc.

4. Identification of System Warehouse Spare Parts(85)

5. (a) Applicable Construction Code (See Work Order) 19 Edition Addenda, Code Cases N/A
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Case N-416-1

6. Identification of components Repaired or Replaced, and Replacement Components.

Name of Component	Name of Manufacture	Manufactures Serial No.	Nat'l bd. No	Work Order No.	Other Ident. Line No	Year Built	Repaired Replaced, or Replacement	Pressure Test	ASME Code Stamped (Yes or No)
MU-0-976	Mission Drilling	NF	N/A	C0167069	S/C 95-5436	N/A	Replaced (37)	<input type="checkbox"/>	No
MS-1-5167	Anchor Darling	NF	N/A	C0177799	S/C 94-7105	N/A	Repaired (38)	<input type="checkbox"/>	No
								<input type="checkbox"/>	
								<input type="checkbox"/>	
								<input type="checkbox"/>	

7. Description of Work (37) Rebuilt Valve (38) Weld Repair to Resurface Worn Discs

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Pressure PSIG Test Temp. °F Pressure Test Conducted IAW Code Case N-416-1

9. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to Section XI of the ASME Code. Signed *Patrick Nugent* Engineering Manager 8/31/04
 (Owner or Owner's Designee) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, employed by HSBCT of Hartford, CT have inspected the Replacement described in this Report on August 31, 2004 and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.
Kenny D. Kim Inspector August 31, 2004 Commissions CA 1828 - NB 9990 A.N.I.C.
 (Title) (Date) (State or Province, National Board)

Note: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 4 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

SECTION H
CONTAINMENT EXAMINATIONS

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: CONTAINMENT EXAMINATIONS

CONTAINMENT EXAMS

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
E-C							
E4.12	Surface Area Grid	RHR Sump	Liner	UT	4-9-04		NRI
E-G							
E8.10	Bolted Connections	Equipment Hatch (1/3)	Bolts	VT-1	4-27-04		NRI
	Bolted Connections	Pen. #58 (Mini Equipment) (1/3)	Bolts	VT-1	4-27-04		NRI
	Bolted Connections	Pen. #60 (Mini Equipment) (1/3)	Bolts	VT-1	4-27-04		NRI
	Bolted Connections	Pen. #63 (Vacuum Relief) (1/3)	Bolts	VT-1	4-27-04		NRI
	Bolted Connections	Pen. #64 (Fuel Transfer Tube) (1/3)	Bolts	VT-1	4-27-04		NRI

SECTION I
AUGMENTED EXAMINATIONS

PG&E

DIABLO CANYON POWER PLANT - UNIT 1

SECOND INTERVAL, THIRD PERIOD, FIRST REFUELING OUTAGE REPORT (1R12) MAJOR ITEM: AUGMENTED EXAMINATIONS

CONTAINMENT EXAMS

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
------------------	-------------	---------------------	--------------------------	--------------	--------------	----------	---------

Augmented

RC Pump 1-2
Flywheel

RC Pump 1-2
Flywheel

RCP 1-2 Flywheel
Inner Half Radius

UT

4-6-04

NRI