

**INSERVICE INSPECTION REPORT FOR  
THE UNIT 2 NINTH REFUELING OUTAGE**

Diablo Canyon Power Plant

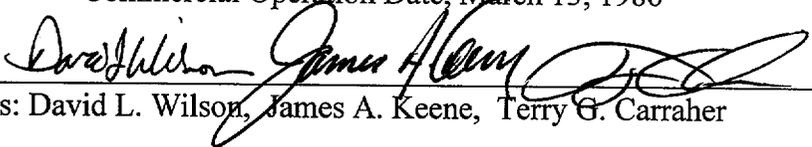
Unit 2

USNRC Docket No. 50-323

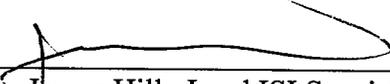
Operating License No. DPR-82

Commercial Operation Date, March 13, 1986

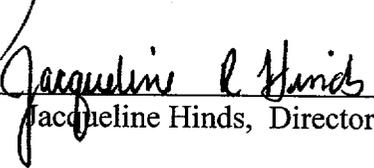
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James Hill, Lead ISI Specialist

Approved By:

  
Jacqueline Hinds, Director Technical Support Engineering

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

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**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 2 was completed during the ninth refueling outage from September through October, 1999. The DCPP Unit 2 ninth refueling outage (2R9) was the second outage in the first period within the second 10-year ISI interval.

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 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 2R9 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 Report Form NIS-2 for those 2R9 work packages closed prior to November 28, 1999 and for any pre-2R9 work packages closed after April 28, 1998. NIS-2 reports for 2R9 work packages which are closed after November 28, 1999 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.

Augmented Examinations, i.e. reactor coolant pump flywheels, are reported in Section H.

5 Welds with limited accessibility were encountered during 2R9 examinations. Four of these weld limitations have been incorporated in relief requests NDE-13.2R9, NDE-15.2R9, and NDE-33.2R9 as a result of the ninth refueling outage examinations, and submitted for approval separately. Therefore, NRC approval is required for PG&E to credit limited examinations of the following welds: WIB-408, WIB-870A, WIC-264A and WIC-264B. To assure compliance with the periodic inspection schedule provided in ASME Section XI Table IWB-2412-1, NRC approval of PG&E's relief requests for these welds is required prior to the end of the second 10 year interval. Relief was previously granted for the limitation to WIB-439A.

**SECTION B**

**ASME CODE REPORT FORM NIS-1**

**FORM NIS-1 OWNER'S 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 Two 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 03/13/86 6. National Board Number for Unit N/A
7. Components 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 68201	12962-85	21359
Steam Gen 2-1	Westinghouse	1161	N/A	68-89
Steam Gen 2-2	Westinghouse	1162	N/A	68-90
Steam Gen 2-3	Westinghouse	1163	N/A	68-91
Steam Gen 2-4	Westinghouse	1164	N/A	68-92
Pressurizer	Westinghouse	1171	N/A	68-106
Class 1 Valves	Various	N/A	N/A	N/A
Class 1 Supports	Various	N/A	N/A	N/A
Class 1 Piping	M.W. Kellogg/ Pullman	N/A	N/A	N/A

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 ½ in. x 11 in., (2) information in items 1 through 6 on this 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 9/99 to 10/99
- 9. Inspection Period Identification: First
- 10. Inspection Interval Identification: Second
- 11. Applicable Edition of Section XI: 1989 Addenda: None
- 12. Date/Revision of Inspection Plan: December 18, 1998, Revision 1
- 13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan: Refer to ISI Report
- 14. Abstract of Results of Examinations and Tests: Refer to ISI Report
- 15. 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 December 29 19 99 Signed Engineering Director By Jacqueline R. Hinds  
Owner

CERTIFICATE OF INSERVICE 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 and employed by H. S. B. I. & I. Co. of Harford, CT have inspected the components described in this Owners' Report during the period 9/99 to 10/99, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owners' Report in accordance with the Inspection Plan and as required by 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 tests, and corrective measures described in this Owners' 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.

Kenny D. Kim Commissions CA 1828, NB 9990 A.N.I.  
Inspector's Signature/Kenny Kim National Board, State, Province and, endorsements.

Date Dec. 30 19 99



FORM NIS-1 (back)

- 8. Examination Dates 9/99 to 10/99
- 9. Inspection Period Identification: First
- 10. Inspection Interval Identification: Second
- 11. Applicable Edition of Section XI: 1989 Addenda: None
- 12. Date/Revision of Inspection Plan: December 18, 1998, Revision 1
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- 14. Abstract of Results of Examinations and Tests: Refer to ISI Report
- 15. 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 December 29 19 99 Signed Engineering Director By Jacqueline L. Hymas  
Owner

CERTIFICATE OF INSERVICE 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 and employed by H. S. B. I. & I. Co. of Harford, CT have inspected the components described in this Owners' Report during the period 9/99 to 10/99, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owners' Report in accordance with the Inspection Plan and as required by 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 tests, and corrective measures described in this Owners' 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.

Kenny D.S. Kim Commissions CA 1828, NB 9990 A.N.I.  
Inspector's Signature/Kenny Kim National Board, State, Province and, endorsements.

Date Dec. 30 19 99

**SECTION C**

**CLASS ONE COMPONENTS**

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: REACTOR VESSEL

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-G-1							
B6.30	RPV2 Closure Head Studs	RPV Bolting > 2" diam.	RPV2 Studs 10 to 18	UT	10-11-99		NRI
B-G-2							
B7.10	RPV2 Thermopl Clamp Bolts (15)	RPV Bolting < 2" diam.	RPV2 Marmon Clamps (5 X 3)	VT-1	10-25-99		NRI
B7.80	CRD Housings	RPV2	Part Length CRDM M-10, 6 Bolts	VT-1	10-16-99		NRI
	CRD Housings	RPV2	Part Length CRDM M-6, 6 Bolts	VT-1	10-16-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PRESSURIZER

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-B							
B2.11	Shell to Bottom Head Circ Weld	Pressurizer 2	Girth 1 - one third	UT	10-2-99		NRI
B2.12	Shell to Bottom Head Long'l Weld	Pressurizer 2	Long'l 6 - twelve inches	UT	10-2-99	Examined 12" from girth weld #1	NRI
B-D							
B3.110	Surge Line Nozzle to Vessel Weld	Pzr 2 to 2*16-14SPL	WIB-439A (N-V)	UT	10-2-99	Scan area limited due to heater penetrations & nozzle geometry. Relief NDE-8.R1.	NRI
B3.120	Spray Line Nozzle Inside Radius	Pzr 2 to 2S6-15-4SPL	Inside Radius Section	UT	10-4-99		NRI
	Spray Line Nozzle Inside Radius	Pzr 2 to 2S6-729-6SPL	Inside Radius Section	UT	10-4-99		NRI
B-H							
B8.20	Support Skirt Weld (1/3)	Pressurizer 2	Girth 10 - one third	MT	10-1-99		NRI
	Support Skirt Weld (1/3)	Pressurizer 2	Girth 10 - one third	UT	10-2-99		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 2

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: STEAM GENERATORS

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	Steam Gen. 2-1	Channel W 1-1 - one third	UT	10-2-99		NRI

The following percentages apply to inservice tubes.

SCOPE	PROBE TYPE	SG 21	SG 22	SG 23	SG 24
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%, plus 20% of Row 3	100%
Hot Leg top-of tubesheet	Plus Point	100%	100%	100%	100%
≥ 5 volt dented TSP intersections	Plus Point	100%	100%	100%	100%
< 5 volt dented TSP intersections	Plus Point	100% from 1H to 2H, 20% at 3H	100% from 1H to 5H, 20% at 6H	100% from 1H to 3H, 20% at 4H	100% from 1H to 3H, 20% at 4H
Roll plugs	Plus Point	100% of hot leg	N/A	100% of hot leg	N/A
Distorted OD bobbin signals at TSP intersections	Plus Point	Per voltage-based repair criteria			
Distorted ID bobbin signals at TSP intersections	Plus Point	100%	100%	100%	100%
Free span dings	Plus Point	20% TSH to 1H	20% TSH to 5H	20% TSH to 3H	20% TSH to 3H
TSP ligament indications	Plus Point	100% of baseline	100% of baseline	N/A	N/A
Tubes unplugged		15	34	23	66
Tube plugged		8	29	5	25
Total plugged		7 gain	5 gain	18 gain	41 gain

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

PAGE 1 of 7

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-G-2							
B7.50	Flange Bolting (4 Studs & Nuts)	Pipe Bolting < 2" diam.	2S6-54-1.5 (WIB-842/WIB-843)	VT-1	9-30-99		NRI
	Flange Bolting (4 Studs & Nuts)	Pipe Bolting < 2" diam.	2S6-1991-1.5 (2-FE-924)	VT-1	9-29-99		NRI
	Flange Bolting (4 Studs & Nuts)	Pipe Bolting < 2" diam.	2S6-1991-1.5 (2-RO-559)	VT-1	9-29-99		NRI
B7.70	HL Recirc before 2V-8702	2S6-109-14SPL	2V-8702: 16 Studs & Nuts	VT-1	9-29-99		NRI
	Accumulator Inj. Loop 1	2S6-253-10SPL+	2V-8956A: 16 Studs & Nuts	VT-1	9-29-99		NRI
	Accumulator Inj. Loop 3	2S6-255-10SPL+	2V-8956C: 16 Studs & Nuts	VT-1	9-29-99		NRI
	SIS to RCS Loop 1 HL	2S6-2575-8	2V-8740A: 16 Studs & Nuts	VT-1	9-29-99		NRI
	Safety Inj Loop 1 Hot Leg	2S6-235-6SPL+	2V-8949A: 12 Studs & Nuts	VT-1	9-30-99		NRI
	RHR Pump 2-1 Inj CL 1	2S6-3844-6SPL+	2V-8818A: 12 Studs & Nuts	VT-1	9-30-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B7.70 cont'd.	Loop 1 Spray Line	2S6-13-4SPL+	2V-8033C: 12 Studs & Nuts	VT-1	9-30-99		NRI
	Loop 2 Spray Line	2S6-14-4SPL+	2V-8033A: 12 Studs & Nuts	VT-1	9-30-99		NRI
	Charging Line Loop 4	2S6-246-3SPL+	2V-8378B: 12 Studs & Nuts	VT-1	10-8-99		NRI
	Charging Inj CL's Header	2S6-1016-3	2V-8820: 12 Studs & Nuts	VT-1	9-29-99		NRI
	Charging Line Aux Spray	2S6-51-2SPL+	2V-8145: 6 Studs & Nuts	VT-1	9-30-99		NRI
B-J							
B9.21	Loop 4 Crossover Stub	2S6-1158-3SPL	WIB-269A	PT	10-1-99		NRI
	Charging Line Loop 4	2S6-246-3SPL	WIB-314	PT	10-8-99		NRI
	Charging Inj Cold Legs Hdr	2S6-1995-3SPL	WIB-98-L	PT	9-27-99		NRI
	Charging Inj Cold Legs Hdr	2S6-1995-3SPL	WIB-98-Q	PT	9-27-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

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CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B9.21 cont'd.	Letdown Line Loop 2	2S6-24-3SPL	WIB-158	PT	10-3-99		NRI
	Letdown Line Loop 2	2S6-24-3SPL	WIB-146	PT	10-1-99		NRI
	Pzr Power RV 2PCV-474	2S6-1171-3SPL	WIB-408	PT	10-5-99	Base material partially obstructed by code ID band, upstream side of weld. 88% accessible.	NRI
	Pzr Power RV 2PCV-474	2S6-1171-3SPL	WIB-410A	PT	10-2-99		NRI
B9.32	SI Pp 2-1 Inj Hot Leg Lp 1	2S6-3863-2	WIB-913	PT	10-4-99		NRI
B9.40	Letdown Line Loop 2	2S6-24-3SPL	WIB-160B	PT	10-4-99		NRI
	Charging Line Aux Spray	2S6-51-2SPL	WIB-790	PT	10-2-99		NRI
	Charging Line Aux Spray	2S6-51-2SPL	WIB-810	PT	9-28-99		NRI
	Charging Line Aux Spray	2S6-51-2SPL	WIB-826	PT	10-1-99		NRI
	Charging Line Aux Spray	2S6-51-2SPL	WIB-803	PT	10-4-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

PAGE 4 of 7

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B9.40 cont'd.	Charging Line Aux Spray	2S6-51-2SPL	WIB-817	PT	9-28-99		NRI
	Reactor Coolant Pp 1 Seal Wtr In	2S6-54-1.5 & 2S6-54-2	WIB-842	PT	9-30-99		NRI
	Reactor Coolant Pp 2 Seal Wtr In	2S6-5398-1.5	WIB-856	PT	10-14-99		NRI
	Reactor Coolant Pp 2 Seal Wtr In	2S6-5398-1.5	WIB-858N	PT	9-28-99		NRI
	Reactor Coolant Pp 3 Seal Wtr In	2S6-56-1.5	WIB-870A	PT	9-27-99	81% coverage due to adjacent bolted flange.	NRI
	Reactor Coolant Pp 3 Seal Wtr In	2S6-56-2	WIB-875	PT	9-27-99		NRI
	Reactor Coolant Pp 3 Seal Wtr In	2S6-56-1.5	WIB-870J	PT	9-27-99		NRI
	Reactor Coolant Pp 4 Seal Wtr In	2S6-57-1.5	WIB-883K	PT	9-28-99		NRI
	Reactor Coolant Pp 4 Seal Wtr In	2S6-57-1.5	WIB-881	PT	9-28-99		NRI
	Loop 1 Cold Leg Drain RCDT	2S6-958-2SPL+	WIB-503	PT	10-1-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

PAGE 5 of 7

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B9.40 cont'd.	Loop 4 Cold Leg Drain RCDT	2S6-960-2SPL+	WIB-650	PT	10-1-99		NRI
	Loop 3 Cold Leg Drain RCDT	2S6-961-2SPL+	WIB-94A	PT	10-1-99		NRI
	SI Pp 2-1 Inj Hot Leg Loop 2	2S6-3864-2	WIB-921	PT	9-28-99		NRI
	Safety Injection Hot Leg Loop 3	2S6-1976-2	WIB-898	PT	9-27-99		NRI
	Safety Injection Hot Leg Loop 4	2S6-1990-2	WIB-907	PT	9-27-99		NRI
	SI Pps Cold Leg Loop 3 Recirc	2S6-3857-2SPL	WIB-946	PT	10-1-99		NRI
	SI Pps Cold Leg Loop 4 Recirc	2S6-3858-2SPL	WIB-952A	PT	10-4-99		NRI
	Loop 1 Cold Leg RCS Vent & Fill	2S6-1140-2SPL	WIB-975C	PT	10-11-99		NRI
	Loop 3 Cold Leg Stub	2S6-1152-2SPL	WIB-1013	PT	10-8-99		NRI
	Charging Injection Out Loop 1 CL	2S6-1991- 1.5SPL+	WIB-534	PT	10-1-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

PAGE 6 of 7

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B9.40 cont'd.	Charging Injection Out Loop 1 CL	2S6-1991- 1.5SPL+	WIB-98-1	PT	9-27-99		NRI
	Charging Injection Out Loop 1 CL	2S6-1991- 1.5SPL+	WIB-514	PT	10-12-99		NRI
	Charging Injection Out Loop 1 CL	2S6-1991- 1.5SPL+	WIB-98-7.5	PT	9-27-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-564	PT	10-8-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-575	PT	9-28-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-600	PT	9-27-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-571	PT	9-28-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-585	PT	9-28-99		NRI
	Charging Injection Out Loop 2 CL	2S6-1992- 1.5SPL+	WIB-98-4	PT	9-27-99		NRI
	Charging Injection Out Loop 3 CL	2S6-1993- 1.5SPL+	WIB-660	PT	10-8-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING

PAGE 7 of 7

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B9.40 cont'd.	Charging Injection Out Loop 3 CL	2S6-1993- 1.5SPL+	WIB-685	PT	10-4-99		NRI
	Charging Injection Out Loop 3 CL	2S6-1993- 1.5SPL+	WIB-671A	PT	9-27-99		NRI
	Charging Injection Out Loop 3 CL	2S6-1993- 1.5SPL+	WIB-690	PT	9-27-99		NRI
	Charging Injection Out Loop 4 CL	2S6-1994- 1.5SPL+	WIB-738	PT	10-1-99		NRI
	Charging Injection Out Loop 4 CL	2S6-1994- 1.5SPL+	WIB-98-3	PT	9-27-99		NRI
	Charging Injection Out Loop 4 CL	2S6-1994- 1.5SPL+	WIB-747	PT	10-1-99		NRI

PG&E

DIABLO CANYON POWER PLANT - UNIT 2

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SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 1

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MAJOR ITEM: INTEGRAL  
ATTACHMENTS

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PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B-K-1							
B10.20	RC Pump 2-1	RCP 2-1 Support Lug	Lug Weld No. 2	PT	10-7-99	Approximately 70% accessible. Relief NDE-16.	NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1

MAJOR ITEM: PIPING SUPPORTS

PAGE 1 of 1

CATEGORY

F-A SUPPORTS

F1.10 TO F1.70 SUPPORT COMPONENTS

The required inservice inspections were performed on 24 Class 1 hangers during the ninth refueling outage between the dates of 09/28/99 and 10/20/99. All supports found acceptable. Data reports are on file.

LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT
14	70-24SL	235	70-33SL	1171	71-69SL
16	1-25SL	237	72-26SL	1171	412-142SL
54	78-101SL	237	72-81SL	1172	412-148SL
54	78-505SL	253	70-1SL	1172	412-149SL
56	78-520SL	254	70-5SL	1665	72-22SL
57	78-102SL	254	412-22SL	1995	72-27SL
57	78-419SL	727	71-57SL	3845	71-3SL
109	72-19SL	727	989-17R	4081	71-21SL

**SECTION D**

**CLASS TWO COMPONENTS**

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: STEAM GENERATORS

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 2-1	Girth W1-3	UT	10-17-99	Spot indication in weld	RI
C1.30	Tubesheet-to- Shell Weld	Steam Generator 2-1	Girth W1-2 - one third	UT	10-17-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: PIPING

PAGE 1 of 3

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
C-D							
C4.30	Safety Injection Pump 2-1	Safety Injection Pump 2-1	8 Studs >2" dia. (Items 1 thru 7 & 11)	UT	10-6-99		NRI
C-F-1							
C5.30	Charg Pp 2-1 Bypass Miniflow	2S6-1466-2	WIC-1466A	PT	9-22-99		NRI
	Charg Pp 2-2 Bypass Miniflow	2S6-1468-2	WIC-1468B	PT	10-18-99		NRI
	CVCS Seal Inj Filter 2-1 In	2S6-3673-2 & 2S6-2	WIC-3673B	PT	9-22-99		NRI
	CVCS Seal Inj Filter 2-1 Out	2S6-1477-2 & 2S6-2	WIC-1477B	PT	9-22-99		NRI
	Reac Cool Pp 2-1 Seal Wtr In	2S6-54-2	WIC-54B	PT	9-27-99		NRI
	Reac Cool Pp 2-1 Seal Wtr In	2S6-54-2	WIC-54E	PT	9-27-99		NRI
	Reac Cool Pp 2-1 Seal Wtr In	2S6-54-2	WIC-54H	PT	10-4-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: PIPING

PAGE 2 of 3

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
C5.30 cont'd.	Reac Cool Pp 2-2 Seal Wtr In	2S6-55-2	WIC-55B	PT	9-27-99		NRI
	Reac Cool Pp 2-2 Seal Wtr In	2S6-55-2	WIC-55E	PT	10-3-99		NRI
	Reac Cool Pp 2-3 Seal Wtr In	2S6-56-2	WIC-56A	PT	9-22-99		NRI
	Reac Cool Pp 2-3 Seal Wtr In	2S6-56-2	WIC-56D	PT	9-22-99		NRI
	Reac Cool Pp 2-4 Seal Wtr In	2S6-57-2	WIC-57C	PT	9-27-99		NRI
	Reac Cool Pp 2-4 Seal Wtr In	2S6-57-2	WIC-57F	PT	9-27-99		NRI
C-F-2							
C5.51	RC Pps Barrier CCW Ret Hdr	2K17-1357-6	WIC-1357C	MT	10-1-99		NRI
	RC Pps Barrier CCW Ret Hdr	2K17-1357-6	WIC-1357C	UT	10-1-99		NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: PIPING

PAGE 3 of 3

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
None	CSP 1 Disch. & SprRng Hdr 1 & 3	2S2-264-8 & 2S3-325-8	WIC-264A	UT	9-29-99	85% coverage due to weld crown configuration	NRI
	Supply Disch. & SprRng Hdr 1 & 3 Supply	2S2-264-8 & 2S3-325-8	WIC-264B	UT	9-29-99	85% coverage due to weld crown configuration	NRI

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 2

MAJOR ITEM: PIPING SUPPORTS

PAGE 1 of 1

CATEGORY

F-A

SUPPORTS

F1.10 TO F1.70

SUPPORT COMPONENTS

The required inservice inspections were performed on 23 Class 2 hangers during the ninth refueling outage between the dates of 09/14/99 and 10/20/99. Results were found acceptable. Data reports are on file.

LINE	SUPPORT	LINE	SUPPORT	LINE	SUPPORT
223	75-15SL	556	413-399SL	3846	73-1SL
227	413-344SL	557	413-388SL	3846	73-2SL
227	2032-2SL	557	2049-1SL	S/G 2-1	SG-02-01-NE
283	413-14SL	558	42-10R	S/G 2-1	SG-02-01-NW
476	413-421R	985	70-36SL	S/G 2-1	SG-02-01-SE
508	71-16SL	1065	2033-23SL	S/G 2-1	SG-02-01-SW
508	71-34SL	1066	413-537SL	LETDOWN HX 2-1	2 supports to base
555	2048-23SL	3845	70-22SL		

**SECTION E**  
**SYSTEM PRESSURE TESTS**

PG&E

DIABLO CANYON POWER PLANT -  
UNIT 2

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT (2R9)

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	10-26-99	STP R-8A.	NRI
1	2	Steam Generators and Connected Piping	10-26-99		NRI
3	2	Auxiliary Feedwater Pump X-1 Discharge	10-31-99		NRI
4	2	RCS Loops 1 & 4 Hot Leg Sample Lines	10-26-99		NRI
5	2	Pressurizer Sample Lines	10-26-99		NRI
6	2	XS Ltdn HX & piping from 8167 to HCV-123	10-26-99		NRI
7	2	RCP Hi Press Seal Water out & XS Ltdn HX outlet piping	10-26-99		NRI
8	2	Charging Pumps Discharge Piping	10-26-99		NRI
9	2	Recip Chg Pump & Disch Piping to 8475	6-18-99		NRI
10	2	Alt Charging Between 8483, 8147 & 8379A	10-26-99		NRI

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
11	2	Charging Injection 8803A & B to 8801A & B	10-15-99		NRI
13	2	Charging Pumps & Suction Piping	9-21-99		NRI
14	2	Regenerative HX and Letdown Piping	10-26-99		NRI
15	2	Boric Acid Pumps Disch Piping	10-26-99		NRI
15a	2	Boric Acid Pumps Disch Piping Between 8104 and 8445	7-15-99		NRI
16	2	Boric Acid Tanks to Pump Disch Iso Valves	8-11-99		NRI
18	2	Accumulator, RHR & Charging Test Lines	10-7-99		NRI
19	2	RWST & Supply to RHR, Cont Spray, SI, Refueling Wtr Purification Pumps & Recirc Line to RHR HX	10-22-99		NRI
20	2	RWST Supply to Chg Pp Suction, 8805A & B to 8924	9-29-99		NRI
21	2	Safety Injection Pump Discharge to 8802A & B and Cold Legs	10-26-99		NRI

PG&E

DIABLO CANYON POWER PLANT -  
UNIT 2

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT (2R9)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 3 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
23	2	RHR Pumps and Discharge Piping	10-22-99		NRI
24	2	RHR Hot Leg injection from 8703 to 8740A & B	10-25-99		NRI
25	2	Spray Additive Tank and Unisolable piping	8-20-99		NRI
31	2	Steam Generator Nitrogen Supply	10-1-99		NRI
32	2	RX Vessel Level Indication and Vent System	10-26-99		NRI
36	2	Accumulator Tanks N2 Supply Header. (pen 51)	10-1-99		NRI
37	2	Accumulators Sample Header	10-26-99		NRI
38	2	Fuel Transfer Tube to Refueling Canal	10-13-99		NRI
40	2	Firewater Supply Before Containment (pen 79)	9-30-99		NRI

PG&E

DIABLO CANYON POWER PLANT -  
UNIT 2

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT (2R9)

MAJOR ITEM: PRESSURE TESTS

ASME SECTION XI SYSTEMS - CLASS 1 & 2

PAGE 4 of 4

TEST NO.	CLASS	DESCRIPTION	EXAM DATE	COMMENTS	RESULTS
41	2	Refueling Canal Water Inlet (pen 46)	10-13-99		NRI
42	2	Reactor Coolant Drain Tank N2 Sup. (pen 52)	11-12-99		NRI
45	2	Service Air (pen 56)	10-1-99		NRI

**SECTION F**

**PRESERVICE INSPECTION ITEMS**

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 ASME SECTION XI SYSTEMS - CLASS 1 & 2 PRESERVICE INSPECTION ITEMS

MAJOR ITEM: PSI

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
B7.30	Stm Gen 2-1 Inlet Manway Studs & Nuts	SG Bolting < 2" diam.	SG2-2 Inlet Manway Bolting	VT-1	10-13-99		NRI
B7.70	Pzr 2RV-8010A Inlet: Bolts <2" diam	2S6-729-6SPL	2RV-8010A: 8 Bonnet Studs & Nuts	VT-1	10-15-99		NRI
B7.70	Pzr 2RV-8010B Inlet: Bolts <2" diam	2S6-728-6SPL	2RV-8010B: 8 Bonnet Studs & Nuts	VT-1	10-14-99		NRI
B7.70	Pzr 2RV-8010C Inlet: Bolts <2" diam	2S6-727-6SPL	2RV-8010C: 8 Bonnet Studs & Nuts	VT-1	10-15-99		NRI
B7.70	Pzr 2RV-8010C Inlet: Bolts <2" diam	2S6-727-6SPL	2RV-8010C: 8 Bonnet Studs & Nuts	VT-1	10-7-99		NRI

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SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
(2R9)  
ASME SECTION XI SYSTEMS - CLASS 1 & 2 PRESERVICE INSPECTION ITEMS

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MAJOR ITEM: PSI SUPPORTS

PAGE 1 of 1

**CATEGORY**

**FA**                      **SUPPORTS**  
F1.10 TO F1.70        SUPPORT COMPONENTS

The required preservice inspections were performed on 6 supports during the ninth refueling outage.

<b>SUPPORT</b>	<b>LINE</b>
414-592R	728
2031-9SL	225
2B0176 (drawing)	Lube Oil on CCP 2-2
23-20R	42
Pump support base	CCP 2-1
Pump support base	CCP 2-2

**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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 04)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
MS-2-FCV-44	Schutte & Koert	N690557	N/A	C0158034	N/A	Unknown	Repair	Yes (22)
MS-2-5167	Anchor Darling	EA998-3-1	N/A	R0158959	0594	1980	Replacement	Yes (07)
MS-2-PCV-21	Copes Vulcan	691095009	N/A	C0159543	0226	1968	Replacement	Yes (07)
MS-2-FCV-41	Schutte & Koert	N/A	N/A	C0164537	0228	Unknown	Repair	No (11)
MS-2-FCV-41	Schutte & Koert	N/F	N/A	R0138262	0228	Unknown	Replacement	No (08)

7. Description of Work 22) Drilled hole in disc 07) Replace Valve internals 11) Replace / Repair Pump Internals 08) Replace Bonnet Bolting

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 04)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
2031-9SL	Anchor Darling	9	N/A	C0164517	0225	N/A	Replacement	Yes (02)

7. Description of Work 02) Replace Support Parts.

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2
2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 07)  
(See Below - Code Stamp Column)
5. (a) Applicable Construction Code 19 Edition          Addenda, Code Cases N/A  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Cases N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
* Stm Gen 2-4	Westinghouse	PEGT1164	68-92	C0154448	N/A	1968	Repair	Yes (22)
*Rcs-2-rv-8010c	Crosby	UIC	N/A	C0164166	0727	Unknown	Replacement	Yes (09)
* Stm Gen 2-1	Westinghouse	PEGT1161	68-89	C0164395	N/A	1968	Replacement	Yes (23)
* Stm Gen 2-1	Westinghouse	PEGT1161	68-89	R0179609	N/A	1968	Repair	Yes (24)
* Stm Gen 2-2	Westinghouse	PEGT1162	68-90	R0179723	N/A	1968	Repair	Yes (24)
* Stm Gen 2-3	Westinghouse	PEGT1163	68-91	R0179724	N/A	1968	Repair	Yes (24)

7. Description of Work 22) Other (Remove Tube) 09) Replace Valve Flange Bolting 23) Replace Washer 24) Plug Tube
8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F
9. Remarks \* Pressure Test IAW Code Case N-416-1 NOP

**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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (Title) December 29, 1999 (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
Kenny D. Kim (Title) December 30, 1999 (Date) CA 1828 - NB 9990 A.N.I. (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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2
2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 08)  
(See Below - Code Stamp Column)
5. (a) Applicable Construction Code 19 Edition          Addenda, Code Cases N/A  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Cases N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
*RO-43	PG&E	N/A	N/A	C0153822	1466	1998	Replacement	No (23)
*RO-44	PG&E	N/A	N/A	C0153824	1468	Unknown	Replacement	No (23)
*RV-2-8121peg	Crosby	N69964-01	N/A	R0167121	0883	Unknown	Replacement	No (05)
*Cvcs-2-548	Grinnell	583181	N/A	C0155531	5092	Unknown	Replacement	Yes (05)
*CCP 2-2	Pacific Pump	45618	N/A	C0158026	N/A	Unknown	Replacement	Yes (11)
*CVCS-2-547	ITT Valve	624834-1-1	N/A	C0155534	5092	Unknown	Replacement	Yes (05)

7. Description of Work 23) Replace RO 05) Replace Valve 11) Replace Pump
8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F
9. Remarks \* Pressure Test IAW Code Case N-416-1 NOP

**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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (Title) December 29, 1999 (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
Kenny D. Kim (Title) December 30, 1999 (Date) CA 1828 - NB 9990 A.N.I. (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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1
2. Plant Diablo Canyon Power Plant Unit Two  
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 & Volume Control System (System 08)  
(See Below - Code Stamp Column)
5. (a) Applicable Construction Code 19 Edition          Addenda, Code Cases N/A  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Cases N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
923-47	PG&E	N/A	N/A	C0153957	1468	Unknown	Replacement	No (02)
923-45	PG&E	N/A	N/A	C0153967	1466	Unknown	Replacement	No (02)
923-89	PG&E	N/A	N/A	C0153926	1466	Unknown	Replacement	No (02)
23-20R	PG&E	N/A	N/A	C0164300	0042	Unknown	Replacement	No (02)

7. Description of Work 02) Replace Support Parts
8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F
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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2
2. Plant Diablo Canyon Power Plant Unit Two  
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 Safety Injection (System 09)  
(See Below - Code Stamp Column)
5. (a) Applicable Construction Code 19 Edition          Addenda, Code Cases N/A  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1989, No Addenda, Code Cases N-416-1
6. Identification of components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
SI-2-8803A	Velan	N/F	N/A	C0162059	1974	Unknown	Repaired	No (10 <sup>1</sup> )
SI-2-8803B	Velan	N/F	N/A	C0162060	1975	Unknown	Repaired	No (10 <sup>1</sup> )
SI-2-8802A	Anchor Darling	N/F	N/A	C0162305	3860	Unknown	Replacement	No (08)
SI-2-8804A	Anchor Darling	N/F	N/A	C0162534	1971	Unknown	Repaired	No (10 <sup>2</sup> )
*Line 2-2033	PG&E	N/A	N/A	C0150233	2033	1997	Replaced	No (15)
*Line 2-1991	PG&E	N/A	N/A	C0153633	1991	1998	Replaced	No (15)

7. Description of Work 10) Repair Valve (1 Machine Disk, 2 Machined Bonnet Flange) See remarks for others.
8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F
9. Remarks 08) Replace Bonnet Bolting 15) Replace Line Segment \* Pressure Test IAW Code Case N-416-1 NOP

**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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 2 of 2

2. Plant Diablo Canyon Power Plant Unit Two  
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 Safety Injection (System 09)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
*Line 2-1994	PG&E	N/A	N/A	C0153634	1994	1998	Replaced	No (15)
*R0-561	Vickery Simms	N/A	N/A	C0153635	1993	1998	Replaced	No (15)
*FE-926	PG&E	N/A	N/A	C0153635	1993	1998	Replaced	No (15)
*Line 2-1992	PG&E	N/A	N/A	C0153635	1992	1998	Replaced	No (15)
*Line 2-1993	PG&E	N/A	N/A	C0153635	1993	1998	Replaced	No (15)
*Line 2-1995	PG&E	N/A	N/A	C0153635	1995	1998	Replaced	No (15)
*FE-925	PG&E	N/A	N/A	C0153636	1992	1998	Replaced	No (15)
*FE-977	Vickery Simms	N/A	N/A	C0153637	3658	1998	Replaced	No (15)
*FE-976	Vickery Simms	N/A	N/A	C0153638	3857	1998	Replaced	No (15)
*FE-974	Vickery Simms	N/A	N/A	C0153639	3855	1998	Replaced	No (15)
*FE-975	Vickery Simms	N/A	N/A	C0153640	3857	1998	Replaced	No (15)
RO-555	PG&E	N/A	N/A	C0154083	1991	1998	Repaired	No (22 <sup>1</sup> )
RO-556	PG&E	N/A	N/A	C0154083	1992	1998	Repaired	No (22 <sup>1</sup> )
RO-557	PG&E	N/A	N/A	C0154083	1993	1998	Repaired	No (22 <sup>1</sup> )
RO-558	PG&E	N/A	N/A	C0154083	1994	1998	Repaired	No (22 <sup>1</sup> )
RO-555	PG&E	N/A	N/A	C0154085	1991	1998	Repaired	No (22 <sup>2</sup> )
RO-556	PG&E	N/A	N/A	C0154085	1992	1998	Repaired	No (22 <sup>2</sup> )
RO-557	PG&E	N/A	N/A	C0154085	1993	1998	Repaired	No (22 <sup>2</sup> )
RO-558	PG&E	N/A	N/A	C0154085	1994	1998	Repaired	No (22 <sup>2</sup> )
FE-927	Vickery Simms	N/A	N/A	C0156955	1994	Unknown	Repaired	No (22 <sup>3</sup> )
SI-2-8803A	Velan	N/F	N/A	C0162059	1974	Unknown	Repaired	No (22 <sup>4</sup> )
* SI-2-rv-8856b	Crosby	N69971-02	N/A	R0173648	0119	Unknown	Replacement	No (05)
* SI-2-rv-8856b	Crosby	RV-2-8856-PEG	N/A	R0186510	0119	Unknown	Replacement	No (05)

9. Remarks. \* Pressure Test IAW Code Case N-416-1 NOP  
(Applicable Manufacturer's Data Reports to be attached)

15) Replace Line Segment 22) Other (1 Fab Orifice, 2 Machine Baffles, 3 Trim Stud, 4 Machine Wedge) 05) Replace Valve

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**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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit Two  
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 Safety Injection (System 09)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
2217-50	PG&E	N/A	N/A	C0154120	1991	Unknown	Replacement	No (02)
2217-31	PG&E	N/A	N/A	C0154123	1991	Unknown	Replacement	No (02)
2217-30	PG&E	N/A	N/A	C0154134	1991	Unknown	Replacement	No (02)
2217-29	PG&E	N/A	N/A	C0154135	1994	Unknown	Replacement	No (02)
2217-27	PG&E	N/A	N/A	C0154140	1994	Unknown	Replacement	No (02)
2217-12	PG&E	N/A	N/A	C0154150	1993	Unknown	Replacement	No (02)

7. Description of Work 02) Replace Support Parts

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (Title) December 29, 1999 (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
(Title) December 30, 1999 (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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 Residual Heat Removal (System 10)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
*RHR-2-RV-8707	Crosby	rv-1-8707-peg	N/A	R0149230	1167	Unknown	Replaced	Yes (05)

7. Description of Work 05) Replace Valve

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

9. Remarks \* Pressure Test IAW Code Case N-416-1 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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (Title) December 29, 1999 (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
Kenny D. Kim (Title) December 30, 1999 (Date) CA 1828 - NB 9990 A.N.I. (State or Province, National Board)

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**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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 Spray (System 12)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
CS-2-8992	Crane-Aloyco	2F	N/A	C0156893-1	2509	N/A	Replaced	Yes (07)
CS-2-8992	Aloyco Div	N-216-SP	N/A	C0164077	2509	Unknown	Replacement	No (22)

7. Description of Work 07) Replace Valve Internals 22) Other (weld build-up on disc)

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 9/14/1999  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 Spent Fuel Pit Cooling (13)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l Bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
SFPHE1	Oat, Joseph Corp.	1817-3c	352	C0163499	N/A	1969	See Remarks	Yes

7. Description of Work See remarks.

8. Tests NONE Hydrostatic Pneumatic Nominal Operating Pressure Other  
Conducted:  
Pressure          psi Test Temp          °F

9. Remarks UP-RATING OF PRESSURE VESSEL TEMPERATURE PER DCN-EM-49448. NEW NAME TAG INSTALLED

**CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this report are correct and this UP-RATING conforms to Section XI of the ASME Code. Signed McGoy Amgen for Harry J. Phillips Technical Support Director 9-15-99  
(Owner or Owner's Designee) Harry J. Phillips (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the UP-RATING described in this Report on 9-8, 1999 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 9-15-99 Commissions CA 1828 - NB 9990  
A.N.I. 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

**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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 14)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
CCW-2-585	C&S	89-06292-01N-02	N/A	C0164089	3007	Unknown	Replacement	Yes (07)

7. Description of Work 07) Replace Valve Internals

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 14)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
414-262SLA	Anchor Darling	217	N/A	C0153291	0316	Unknown	Replaced	Yes (01)
414-347SL	Anchor Darling	219	N/A	C0153292	0314	Unknown	Replaced	Yes (01)
414-22SL	Anchor Darling	36	N/A	C0153476	0316	Unknown	Replaced	Yes (01)

7. Description of Work 01) Replaced Support

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 1

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 45)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
Containment	PG&E	N/A	N/A	C0164227	Liner 91'	1970	Repaired	No (22)
Containment	PG&E	N/A	N/A	C0164228	Liner 136'	1970	Repaired	No (22)
Containment	PG&E	N/A	N/A	R0195202	Recirc Sump	1970	Repaired	No (22)

7. Description of Work 22) Other (repair coatings)

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

9. Remarks         

**CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this report are correct and this Repair conforms to Section XI of the ASME Code. Signed Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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 11/28/99  
77 Beale Street, San Francisco, CA 94106 Sheet 1 of 2

2. Plant Diablo Canyon Power Plant Unit Two  
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 (System 85)  
(See Below - Code Stamp Column)

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

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

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l bd. No.	Work Order No.	Other Ident. Line No.	Year Built	Repaired Replaced, or Replacement	ASME Code Stamped (Yes or No)
S/C 93-3508	Crane-Aloyco	2F	N/A	C0156893-4	CS-2-8992	Unknown	Repaired	Yes (07)
S/C 93-7965	Dresser	BM-07858	N/A	C0157452	MS-1-RV-5	Unknown	Replacement	Yes (07)
S/C 93-7965	Dresser	BM-07866	N/A	C0157455	MS-1-RV-222	Unknown	Replacement	Yes (07)
S/C 42-3254	Crosby	U1A	N/A	R0174139	RCS-0-RV-8010C	Unknown	Replacement	Yes (07)

7. Description of Work 07) Replace Valve Internals

8. Tests Conducted: Hydrostatic          Pneumatic          Nominal Operating Pressure          Other           
Pressure          psi Test Temp          °F

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 Jacqueline R. Hinds Technical Support Director December 29, 1999  
(Owner or Owner's Designee) Jacqueline R. Hinds (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 H.S.B.I. & I. Co. of Hartford, CT. have inspected the Repair/Replacement described in this Report on December 30, 1999 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 December 30, 1999 Commissions CA 1828 - NB 9990 A.N.I.  
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.



**SECTION H**  
**AUGMENTED EXAMINATIONS**

SECOND INTERVAL, FIRST PERIOD, SECOND REFUELING OUTAGE REPORT  
 (2R9)  
 AUGMENTED EXAMS

MAJOR ITEM: AUGMENTED EXAMINATIONS

PAGE 1 of 1

CATEGORY ITEM	DESCRIPTION	COMPONENT / LINE	WELD OR COMPONENT NO.	EXAM TYPE	EXAM DATE	COMMENTS	RESULTS
	RC Pump 2-2 Flywheel: Keyway and Ream Bolt Hole exams only	RC Pump 2-2 Flywheel	RC Pump 2-2 Keyway & Ream Bolt Hole only	UT	10-2-99		NRI
	RC Pump 2-3 Flywheel: 100%	RC Pump 2-3 Flywheel	RC Pump 2-3 Flywheel & Keyway	MT	10-4-99		NRI
	RC Pump 2-3 Flywheel: 100%	RC Pump 2-3 Flywheel	RC Pump 2-3 Flywheel & Keyway	UT	10-5-99		NRI

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