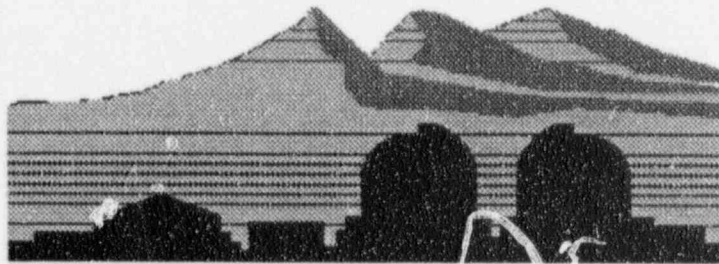


**SAN ONOFRE
NUCLEAR GENERATING
STATION
UNIT 2**



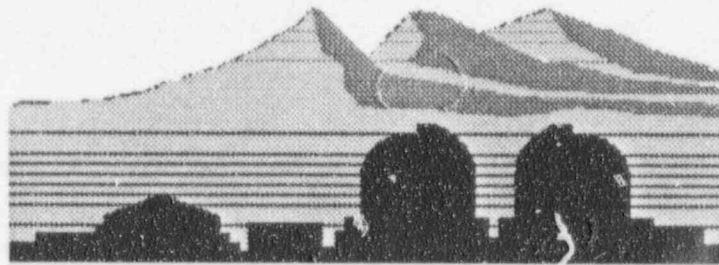
***INSERVICE INSPECTION SUMMARY
REPORT***

**2nd Interval , 1st Period
Cycle 9 Refueling outage**

U2C9

***Site Technical Services
ISI Group***

**SAN ONOFRE
NUCLEAR GENERATING
STATION
UNIT 2**



**INSERVICE INSPECTION SUMMARY
REPORT
CYCLE-9 REFUELING OUTAGE**

JUNE 19, 1997

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1 INTRODUCTION

This document refers to the implementation of the Inservice Inspection (ISI) conducted at the San Onofre Nuclear Generating Station (SONGS) Unit 2 for the 40-year life of the plant from August 18, 1983 through August 18, 2023. Inspection Program B which uses a four 10-year intervals has been adopted by SONGS. These 10-year intervals are shown below:

1st Interval	August 18, 1983 through August 17, 1993
2nd Interval	August 18, 1993 through August 17, 2003
3rd Interval	August 18, 2003 through August 17, 2013
4th Interval	August 18, 2013 through August 17, 2023

Each 10-year Interval is further divided into 3 periods which is adjusted to accommodate 2 refueling outages in each period. Adjustments of the intervals to accommodate these refueling outages is allowed by the code to extend or decrease the interval by as much as 1 year. These extension was used in the 1st 10-year interval which ended in March 1994.

The 1st and 2nd 10-year intervals are:

1st Interval	August 18, 1983 through March 31, 1994
2nd Interval	April 1, 1994 through August 17, 2003

The 3 periods for the 2nd 10-year interval are as follows:

<u>PERIODS</u>	<u>DATES</u>	<u>OUTAGES</u>
1	Apr 1, 1994 - Aug 17, 1997	U2C8, U2C9
2	Aug 18, 1997 - Aug 17, 2001	U2C10, U2C11
3	Aug 18, 2001 - Aug 17, 2003	U2C12, U2C13

ASME Code Section XI, Article IWA-6000, Records & Reports, the ISI Program submitted to the NRC (Doc. # 90066 Rev 3) and 90063 Rev 2 and the ISI procedures were used to put this report together. This report is intended to provide a summary of the ISI activities performed during the Unit 2 Cycle 9 outage. Detailed descriptions of these activities are documented, controlled and maintained in accordance with the Owner's Technical Specification commitments.

2 PLAN & SCHEDULE

CLASS	CATEGORY	TOTAL EXAMS REQUIRED	PERIOD	PERIOD	PERIOD
			1	2	3
1	B-A	27	3	2	23
	B-B	8	3	2	3
	B-D	34	10	0	24
	B-F	28	10	9	9
	B-G-1	264	84	82	98
	B-G-2	175	63	57	55
	B-H	2	1	0	1
	B-J	164	56	54	54
	B-K-1	29	7	10	12
	B-L-1	2	0	0	2
	B-L-2	1	0	0	1
	B-M-1	8	2	0	6
	B-M-2	6	2	2	2
	B-N-1	1	1	1	1
	B-N-2	30	0	0	30
	B-N-3	2	0	0	2
	B-O	10	0	0	10
	B-P	Each Refueling Outage			
	B-Q	Per Tech Spec			
2	C-A	20	7	6	7
	C-B	8	2	3	3
	C-C	124	26	49	49
	C-F-1	248	85	80	83
	C-F-2	38	13	13	12
	C-G	5	1	2	2
	C-H	Each Inspection Period			
	3	D-A (System Pressure Test)	Each Inspection Period		
D-B (System Pressure Test)		Each Inspection Period			
D-C (System Pressure Test)		Each Inspection Period			
D-A (Integral Attachments)		Unit-2 has no Integral Attachment in this Category			

2 PLAN & SCHEDULE

CLASS	CATEGORY	TOTAL EXAMS REQUIRED	PERIOD	PERIOD	PERIOD
			1	2	3
3	D-B (Integral Attachments)	510	104	205	207
	D-C (Integral Attachments)	16	4	6	6
IWF	F-A	295	101	98	96

3 SUMMARY REPORT

Date of Document Completion.....June 19, 1997

Name & Address of Owners:

Southern California Edison
2244 Walnut Grove Ave.
Rosemead, CA 91770

San Diego Gas & Electric Co.
101 Ash St.
San Diego, CA 92112

City of Anaheim
Public Utilities Department
City Hall West - 11th Floor
201 S. Anaheim Blvd.
Anaheim, CA 92805

City of Riverside
Public Utilities Department
3900 Main St.
Riverside, CA 92522

Name & Address of Generating Plant:

San Onofre Nuclear Generating Station
14000 Basilone Road, 4 Miles South of San Clemente
San Clemente, CA 92522

Number Designation of the Unit.....Unit 2

Commercial Service Date for the Unit.....August 18, 1983

REFUELING OUTAGE NO.

Refueling Outage Number:

U2C9

FGRM NIS-1 (back)

- 8. Examination Date: May 23, 1995 to April 1, 1997
- 9. Inspection Period Identification: X 1st Period 2nd Period 3rd Period
- 10. Inspection Interval: 1st 10-Yr X 2nd 10-Yr 3rd 10-Yr 4th 10-Yr
- 11. Applicable Edition of Section XI.....1989 Edition, No Addenda
- 12. Date/Revision of Inspection Plan.....November 8, 1995 Doc # 90063, Rev 2
- 13. Abstract of Examination & Test.....See page 9
- 14. Abstract of Results of Examinations & Tests:.....See page 10
- 15. Abstract of Corrective Measures:.....See page 11

We certify that a) the statement 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. N/A Expiration Date: N/A

Date 6/20 19 97 Signed Southern California Edison By M. R. Heet
(Owner) Manager, Site Technical Services

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 of California and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period May 23, 1995 to April 1, 1997 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 Owner's 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, tests, and corrective measures described in this Owner's 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.

[Signature] Commissions CA 1262, NB 8024 I, B, C, S, N, IS.
Inspector's Signature NB, State, Province or Endorsements

Date June 20, 19 97

ABSTRACT OF EXAMINATIONS & TESTS

This report covers the inservice examination activities conducted at the San Onofre Nuclear Generating Station (SONGS), Unit 2. This activity is one of the two that are scheduled for the 1st period of the 2nd 10-year interval as described in the ISI Program Plan submitted to NRC and Doc. 90063, Rev. 2. The inservice examinations were conducted in accordance with the of the ASME Boiler and Pressure Vessel Code Section XI, 1989 Edition No Addenda.

The services of NDE Levels-I, II & III (UT, PT, MT, & VT) were contracted to and provided by Lambert, MacGill, Thomas, Inc. while additional VT Level-II services were provided by SCE.

ISI Visual Examinations (VT-2) performed in conjunction with the Reactor Coolant System pressure test was performed by SCE VT Level-II examiners. List of examinations and tests are included in attachment-1.

Arkwright Mutual Insurance Company provided the services of the Authorized Inspection Agency (AIA) Authorized Nuclear Inservice Inspectors (ANII's).

ABSTRACT OF RESULTS OF EXAMINATIONS & TESTS

The inservice and preservice examinations conducted at SONGS 2 were performed between 5/23/95 and 4/1/97. These examinations were performed to fulfill the requirements of 10CFR50.55a(g)(4) and IWA-1400, Owner's Responsibilities of ASME Code Section XI, 1989 Edition, No Addenda.

The number of components and supports for Class 1, 2 and 3 selected for examination was based on the ISI Program Plan Doc. # 90063, Rev. 2 employing Inspection Program Plan B of the ASME Code Section XI, 1989 Edition, No Addenda. This code edition also employs the Mandatory Appendix VII which requires qualification of NDE personnel for UT examination. All the UT Level-I, UT Level-II and Level-III examination personnel performed the UT examinations were qualified per Appendix VII.

All the pressure retaining components of ASME Class 1, 2 and 3 System pressure test were performed per the requirement of ASME Code Section XI 1989 Edition, No Addenda.

IN Class 1 and 2 components 163 welds/components were examined for volumetric examination, 122 for surface, and a total of 101 for a combined VT-1 and VT-3. IN Class-3 components 83 supports were examined for Visual VT-1 and VT-3 for the welded attachments and support components per the Code requirements.

All the NDE examinations were found acceptable with no relevant indications.

With the completion of ISI examinations during Unit-2 cycle 8 and cycle 9 refueling outages SCE has met the Code requirements for the 2nd Interval 1st period as stated in NRC approved Inservice Inspection Program paragraph 1.5.3, page 6.

ABSTRACT OF CORRECTIVE MEASURES

All the ISI NDE examinations were found acceptable with no relevant indications, hence corrective measures were not needed.

4 ABSTRACT OF NIS-2 REPAIRS & REPLACEMENTS

Abstract of Records of Repairs and Replacements

MO	EQID	Class	NIS-2	Worksum
1	93091435001 S21204MR435	III-2	11/21/95	Replaced valve & fittings
2	94082138001 S2SI038H039A	III-2	7/17/96	Snubber deletions
3	94082140001 S2SI038H015A	III-2	6/19/96	Replaced snubbers w/ rigid struts
4	94082254000 S2SI038H115	III-2	6/19/96	Installed new rigid strut
5	95040232000 S21201MP004	III-1	6/11/97	Replaced mechanical seal cartridge
6	95060405000 S21204MR416	III-2	6/19/96	Installed a tube union
7	95060652000 S21208MW219	III-2	6/14/96	Replaced valve stem
8	95060821000 S21208MW220	III-2	6/14/96	Replaced valve stem
9	95060988001 S21208MW246	III-2	6/14/96	Replaced valve stem
10	95081966000 027-06026 (PSV)	III-2	12/8/95	Replaced valve spindle, spring & washers
11	95090458000 2HV4053	III-2	6/9/97	Replaced valve plugs
12	95091026000 2HV4054	III-2	6/9/97	Replaced valve plugs
13	95091684000 S21208MW218	III-2	1/10/96	Replaced valve stem
14	95100597000 2HV8421	III-2	6/9/97	Replaced valve plug
15	95100593001 2PV0201A	III-2	7/17/96	Replace valve spindle
16	95111191000 2PV0201B	III-2	8/23/96	Replaced valve spindle
17	95111628000 2FT0212	III-2	6/14/96	Replaced 3-valve manifold
18	95120527000 S21208MR221	III-2	8/23/96	Replaced valve disc
19	96030073000 2PSV0200	III-1	6/9/97	Replaced valve & flange bolting
20	96030120000 2PSV0201	III-1	6/9/97	Replaced valve & flange bolting
21	96030150000 2PSV8403	III-2	6/9/97	Replaced relief valve
22	96030193001 2PSV8409	III-2	5/14/97	Replaced main steam safety valve
23	96030199000 2PSV8410	III-2	1/21/97	Replaced main steam safety valve & inlet nuts
24	96030210000 2PSV8412	III-2	1/21/97	Replaced main steam safety valve & inlet nuts
25	96030229000 2PSV8417	III-2	1/21/97	Replaced main steam safety valve & inlet nuts
26	96030233000 2PSV8418	III-2	1/21/97	Replaced main steam safety valve & inlet nuts
27	96030964000 S21204MU024	III-2	6/9/97	Replaced valve disc
28	96031222000 2PV0100A	III-1	6/12/97	Replaced upper bonnet bellows assembly
29	96031224000 2PV0100B	III-1	6/12/97	Replaced upper bonnet bellows assembly
30	96031765000 2PSV9349	III-2	5/14/97	Replaced valve
31	96031968000 S2SI038H015A	III-2	6/19/96	Replaced snubbers w/rigid struts
32	96032350000 S21201MP002	III-1	5/14/97	Replaced mechanical seal cartridge
33	96032632001 S21208MW248	III-2	6/17/96	Replaced bladder assembly
34	96033361000 S2RC018H001N	III-1	1/10/97	Removed snubbers
35	96033362000 S2RC147H001B	III-1	1/10/97	Removed snubbers
36	96033363000 S2SI165H006	III-1	1/21/97	Removed snubbers
37	96033368000 S2SI043H020	III-1	1/21/97	Removed snubbers
38	96033369000 S2SI152H001	III-1	1/21/97	Removed snubber
39	96033371000 S2SI043H016	III-1	1/10/97	Replaced snubber w/ rigid strut
40	96033372000 S2SI043H018A	III-1	1/21/97	Replaced snubbers w/ rigid struts
41	96033373000 S2SI059H009	III-1	1/10/97	Replaced snubber w/ rigid strut
42	96033440000 S21204MU018	III-2	6/9/97	Replaced valve disc
43	96033461000 S2SI044H001	III-1	1/21/97	Removed snubbers
44	96033475000 S2SI044H008	III-1	1/10/97	Removed spring hanger
45	96033494000 S2SI044H003	III-1	1/10/97	Replaced snubbers w/ rigid struts
46	96033531000 S2SI045H005	III-1	1/21/97	Removed snubbers
47	96033827000 S21204MU012	III-2	6/9/97	Replaced valve disc
48	96033981000 S21301ME088	III-2	4/11/97	Replaced manway cover bolting
49	96040025000 S21201MP001	III-1	6/11/97	Replaced mechanical seal cartridge
50	96040311000 S2SI045H008	III-1	1/10/97	Replaced snubber w/ rigid strut

Abstract of Records of Repairs and Replacements

MO	EQID	Class	NIS-2	Worksum	
51	96040329000	S2SI046H002	III-1	1/21/97	Removed snubbers
52	96040351000	S2SI062H002	III-1	1/21/97	Removed snubbers
53	96040352000	S2SI155H001	III-1	1/21/97	Removed snubber
54	96040354000	S2SI046H006	III-1	1/21/97	Replaced snubber w/ rigid strut
55	96040356000	S2SI046H010	III-1	1/21/97	Replace snubber w/ rigid strut
56	96040912000	S21201MP003	III-1	5/15/97	Replaced mechanical seal cartridge
57	96040943000	S2SI062H001	III-1	1/10/97	Replaced snubber w/ rigid strut
58	96040946000	S2SI063H022	III-1	1/10/97	Removed snubber
59	96040947000	S2SI067H002	III-2	1/10/97	Removed snubber
60	96040948000	S2SI063H018	III-1	1/10/97	Replaced snubber w/ rigid strut
61	96040949000	S2SI063H020	III-1	1/10/97	Replaced snubbers w/ rigid strut
62	96040950000	S2SI064H020	III-1	1/21/97	Removed snubber
63	96040951000	S2SI064H007	III-1	1/21/97	Replaced snubbers w/ rigid struts
64	96040953000	S2SI066H005	III-1	1/21/97	Removed snubbers
65	96040957000	S2SI074H002	III-1	1/10/97	Removed snubber
66	96040958000	S2SI066H010	III-1	1/10/97	Replaced snubbers w/ rigid strut
67	96040959000	S2SI087H019	III-2	1/21/97	Removed snubber
68	96040960000	S2SI087H007	III-2	1/10/97	Replaced snubbers w/ rigid struts
69	96040963000	S2SI168H001	III-1	1/21/97	Removed snubber
70	96040965000	S2SI168H002	III-1	1/21/97	Replaced snubbers w/ rigid struts
71	96041150000	S21204MU025	III-2	6/9/97	Replaced disc, bonnet bolting and added tack welds
72	96062131000	S21208MU067	III-2	4/1/97	Replaced check valve
73	96081814000	2PT8239	III-2	5/13/97	Replaced tubing clamp nuts
74	96090154003	2LV0110B	III-2	6/10/97	Replaced disc stack
75	96090379000	S2-1201-ML-018	III-1	4/11/97	Replaced pipe support
76	96100613000	S21201MU029	III-1	4/11/97	Replaced modified pipe support
77	96101131000	S21305MU129	III-2	6/9/97	Replaced valve disc
78	96101220000	S21204MP019	III-2	5/14/97	Replaced stuffing box bolting
79	96101374000	S21305MU036	III-2	6/9/97	Replace valve disc and hinge pin cover bolting
80	96101527000	S21301ME089	III-2	4/11/97	Replaced manway bolting
81	96101530000	S21301ME088	III-2	4/11/97	Replaced manway cover nut
82	96110458000	S21305MU129	III-2	6/9/97	Repaired disc bushing bores
83	96110459000	S21305MU036	III-2	6/9/97	Repaired disc bushing bores
84	96110999001	S21305MU036	III-2	6/9/97	Rewelded hinge pin cover plates
85	96111008001	S21305MU129	III-2	6/9/97	Repaired hinge pin closure plates
86	96111540000	S2SS031H008	III-2	5/15/97	Replaced load stud w/load pin
87	96111591000	S22423MU055	III-2	5/13/97	Replaced valve bonnet
88	961201146	S21204ML060	III-2	6/10/97	Rated LPSI piping lines from 75 to 175 psig
89	96120339000	2LV0227A	III-2	6/11/97	Reinstalled tack welds on valve body to seat locks
90	96120495000	2TE0112-1	III-1	6/9/97	Replaced thermowell
91	96120496000	2TE0115-2	III-1	6/9/97	Replaced thermowell
92	96120497000	2TE9178-3	III-1	6/9/97	Replaced thermowell
93	96120548000	S21201ME087	III-1	1/21/97	Replaced manway cover bolting
94	96120605000	S2ST610H002	III-2	5/14/97	Replaced snubber
95	96120743000	S2SS072H00Y	III-2	5/15/97	Replaced snubber
96	96120819000	S21301ME089P	III-1	6/9/97	Installed tube plugs
97	96120863000	S21104CEDM	III-1	5/13/97	Replaced vent stem
98	96120875000	S21104CEDM	III-1	3/97	Replaced housing nut
99	96121415001	S2RC012H057	III-1	5/13/97	Replaced pipe clamp
100	96121541000	S2FW189H013A	III-2	5/15/97	Replaced snubber
101	96121643000	S2RCP02H001	III-1	1/29/97	Removed snubber tow rod pivot lugs

MO	EQID	Class	NIS-2	Worksum
102	96121941000 S21204MU024	III-2	6/9/97	Replaced disc
103	96121943000 S21204MU025	III-2	6/9/97	Reinstalled original disc
104	96121944000 S21204MU025	III-2	6/9/97	Added four new tack welds
105	96121945000 S21204MU024	III-2	6/9/97	Added four new tack welds
106	97010213001 S2SS042H021	III-2	5/14/97	Replaced snubber and pipe clamp
107	97010253000 S2RC157H00L	III-2	5/15/97	Replaced snubber
108	97010319000 S2ST015H017	III-2	5/15/97	Replaced snubber
109	97010322001 S21208MU003	III-2	5/13/97	Resealwelded body to bonnet
110	97010759000 2HV9307	III-2	5/15/97	Repaired threaded gate neck stem pin hole
111	97010946000 S21305MU036	III-2	6/9/97	Replaced seat ring & repaired eroded areas
112	97011131000 S21305MU129	III-2	5/14/97	Resealwelded body to seat ring
113	97011349000 S2SI063H018	III-1	5/15/97	Replaced strut load pins
114	97021178000 S21201MP001	III-1	5/14/97	Replaced mechanical seal cartridge
115	97021481000 S21301ME089P	III-1	5/13/97	Replaced tube plugs
116	97030013000 S21104CEDM	III-1	5/14/97	Repaired housing nut/ball seal housing
117	97030186001 S21201ME087	III-1	6/11/97	Replaced thermowell & nozzle
118	97031346000 S21301ME069P	III-1	6/9/97	Replaced manway cover bolting
119	97031358000 S21301ME089P	III-1	6/9/97	Replaced manway bolting
120	97031365000 S21301ME088P	III-1	5/13/97	Replaced manway stud
121	97031369000 S21301ME088P	III-1	5/13/97	Replaced manway stud

5 NDE RECORDS

NDE PROCEDURES:

SO23-XXVII-20.28	Ultrasonic Examination of Reactor Vessel Flange Stud Hole Threads
SO23-XXVII-20.47	Magnetic Particle Examination
SO23-XXVII-20.48	Liquid Penetrant Examination
SO23-XXVII-20.49	Visual Examination Procedure to Determine the Condition of Nuclear Parts, Components and Surfaces
SO23-XXVII-20.50	Visual Examination Procedure for the Evidence of Leakage
SO23-XXVII-20.51	Visual Examination Procedure for Operability of Nuclear Components and Supports and Conditions Relating to their Functional Adequacy
SO23-XXVII-20.52	UT Examination of Nozzle Inner Radius Areas
SO23-XXVII-20.53	UT Examination of Thickness Measurement
SO23-XXVII-20.54	UT Examination of Nuclear Cooling System Ferritic Piping
SO23-XXVII-20.55	UT Examination of Nuclear Cooling System Austenitic Piping
SO23-XXVII-20.56	UT Flaw Sizing
SO23-XXVII-20.57	UT Examination of Steel Forged Bolts & Studs, 2" and Greater in Diameter.
SO23-XXVII-20.58	UT Examination of Ferritic Steel Welds Using Time-of-Flight Diffraction Method
SO23-XXVII-20.59	Planar Size Characterization to ASME Section XI Code Requirements
SO23-XXVII-20.61	Preparation of the "ADAM" System
SO23-XXVII-20.62	Evaluation & Analysis of UT C-Scan Data Using ADAM Plus UT Imaging System
SO23-XXVII-20.63	UT Examination of Reactor Coolant Pump Flywheels
SO23-XXVII-20.66	UT of Vessel Welds & Adjacent Base Metal
SO23-XXVII-20.67	UT Examination of Reactor Coolant Pump Flywheels without Inner Bore Keyways

NDE PERSONNEL CERTIFICATION RECORDS

<u>NAMES</u>	<u>METHOD</u>	<u>LEVEL</u>	<u>Cert</u>	<u>Eye Test</u>
<u>Lambert MacGill & Thomas, Inc.</u>				
Elwin L. Thomas	UT, PT, MT	III	X	X
	VT-1,2,3,4	III	X	X
William D. Carlin	UT	III	X	X
	PT	II	X	X
Jeffrey M. Johnson	UT, PT, MT	II	X	X
	VT-1,2,3,4	II	X	X
Wayne L. Thomas	UT, PT, MT	II	X	X
	VT-1,2,3,4	II	X	X
Mark Seiwald	MT, PT, UT	II	X	X
	VT-1	II	X	X
<u>Southern California Edison (SCE)</u>				
Barry Seaholts	VT-1,2,3	II	X	X
Jason Janke	VT-1,2,3	II	X	X
T.M. Pierno	VT-1,2,3	II	X	X
Robert Keller	VT-2,	II	X	X
H.Edward McNeill	VT-2	II	X	X
P.Fred Haderlie	VT-2	II	X	X

6 ISI PROCEDURES & TRAVELERS

ISI Procedures

- SO23-IN-1 Inservice Inspection Program
- SO123-XVII-1 Inservice Inspection Program Implementation
- SO123-XVII-1.1 Inservice Inspection Maintenance
- SO23-XVII-3.1 Inservice Inspection of Class 1 Components and Their Supports
- SO23-XVII-3.1.1 Refueling Outage Interval Examination of the Reactor Coolant Pressure Boundary to Detect Leakage
- SO23-XVII-3.2 Inservice Inspection of Class 2 Components and Their Supports
- SO23-XVII-3.3 Inservice Inspection of Class 3 Components and Their Supports
- SO23-XVII-3.4 Location Reference Markers
- SO123-XVII-2 Inservice Inspection of Reactor Coolant Pump Flywheels

ISI Construction Work Orders (Travelers)

Inside Containment.....	96031993
Outside Containment.....	96031996

7 AUGMENTED EXAMINATIONS

Reactor Coolant Pump Flywheels

All the four Reactor Coolant Pump Flywheels volumetrically examined per the requirements of Regulatory Guide 1.14, Rev.1 for the 1st inspection period of 2nd interval, as stated in NRC approved ISI Program paragraph 2.11.3 page 21.

High Energy Lines

A total of 69 high energy line welds were volumetrically examined and found acceptable with no relevant indications.

8.0 STEAM GENERATOR EXAMINATIONS



SOUTHERN CALIFORNIA
EDISON

An EDISON INTERNATIONAL Company

February 6, 1997

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

Gentlemen:

Subject: Docket No. 50-361
Special Report: Inservice Inspection of Steam Generator Tubes
San Onofre Nuclear Generating Station, Unit 2

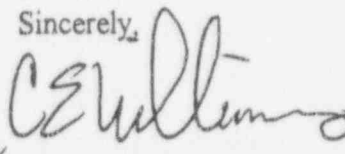
On January 24, 1997, Edison completed an inservice inspection of steam generator tubes at San Onofre Nuclear Generating Station, Unit 2. Reporting Requirement 5.7.2.c of Appendix A, Technical Specifications to Facility Operating License NPF-10, requires the results of steam generator tube inspections be reported to the Nuclear Regulatory Commission.

The enclosed report provides the number of tubes plugged or sleeved, and the results of tube inspections which fall into Category C-3 (as defined in Section 5.5.2.11.c).

The initial inspection results indicate that an additional inspection should be performed after about 12 months of operation. Edison will submit a final assessment of the enclosed inspection results within 180 days of the end of the Unit 2 Cycle 9 refueling outage. Because Unit 2 Cycle 9 is scheduled for about 24 months of operation, Edison is planning a mid-cycle outage to complete this inspection.

If you require any additional information, please so advise.

Sincerely,


For G. T. Gibson
Manager, Compliance

Enclosure:

cc: L. J. Callan, Regional Administrator, NRC Region IV
J. E. Dyer, Director, Division of Reactor Projects, NRC Region IV
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV
J. A. Sloan, NRC Senior Resident, San Onofre Units 1, 2 & 3
M. B. Fields, NRC Project Manager, San Onofre Units 2 and 3
Institute of Nuclear Power Operations (INPO)

Unit 2
San Onofre Nuclear Generating Station

Special Report - Inservice Inspection of
Steam Generator Tubes

bcc:

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CDM Files
ELFS (2)
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SPECIAL REPORT - INSERVICE INSPECTION OF STEAM GENERATOR TUBES

Inspection Program

Planned Inspection Scope

Table 1 summarizes the planned inspection program. In addition, the inspection program included:

- a) eddy current profilometry at the top of the tubesheet of a small number of tubes adjacent to "tie rods" where denting has been experienced, and a sampling of hot leg dented tube support intersections.
- b) inspection with the Plus-Point Probe of indications by the bobbin probe that were non-quantifiable or distorted.

Inspection Scope Expansion

Table 2 summarizes significant inspection program scope expansion in response to inspection results. In addition:

- a) all hot leg eggcrate intersections that were identified by bobbin probe to have a quantifiable indication, were examined with the Plus-Point Probe to verify that the degradation mechanism was volumetric mechanical wear.
- b) tubes that were selected for plugging due to tube-to-support wear were examined with the Plus-Point Probe to verify that the degradation mechanism was volumetric mechanical wear.
- c) significant numbers of dented tube support intersections were examined with an eddy current profilometry probe to confirm and improve Edison's understanding of the size and shape profile of these intersections.

Results

The most salient point in the inspection of tubing falling into Category C-3 is the continuing progression of circumferential and axial cracking in the vicinity of the explosively formed expansion transition at the top of the inlet (hot leg) tubesheet.

Other tubing degradation was also identified.

- a) Most notable was axial cracking at the intersections of tubing and eggcrate supports on the inlet (hot leg) side of the steam generator. This cracking was observed at intersections experiencing denting, and at intersections with no conclusive indications of denting. (Denting is the plastic deformation of tubes resulting from the growth/buildup of corrosion products (magnetite) in the tube-to-tube support structure annuli.)

- b) Axial cracking was identified in areas between supports (commonly called "freSPAN") on the hot leg side of the steam generators.
- c) A five-fold increase in denting was identified in the region composed of intersections of supports with tubing on the hot leg side of the steam generators. These support intersections are labeled 04H, 05H, 06H, 07H, and 08H on Figure 1, the steam generator internal location reference guide.
- d) Previously identified tubing mechanical wear at tube supports is progressing typically for this steam generator design.

In accordance with "DRAFT" Regulatory Guide 1.121 (Bases for Plugging Degraded PWR Steam Generator Tubes) an assessment of the significance of these various indications will be conducted using:

- (a) The "DRAFT" Proposed Steam Generator Rule (50.XX), "Steam Generator Tube Integrity"
- (b) The associated "DRAFT" Regulatory Guide X.XX, "Steam Generator Tube Integrity"
- (c) Nuclear Regulatory Commission Generic Letter 95-05, "Voltage-Based Repair Criteria for Westinghouse Steam Generator Tubes Affected by Outside Diameter Stress Corrosion Cracking"

Removal of Tubes from Service (by Plugging)

Table 3 illustrates the number of tubes removed from service in each steam generator. Each tube is only accounted for once in this listing, although it may also have an eddy current indication of a type below the point in the listing where it appears.

In-Situ Hydrostatic Testing of Tubing

Table 4 provides a summary of in-situ hydrostatic testing of tubing.

Removal of Tubing Samples from the Steam Generators

Portions of tubes (Row-Column) 94-32, 61-111, and 16-164 were removed from Steam Generator E-089 for destructive examination. Edison will update the Commission on the results of these examinations in the follow-up report discussed in the cover letter.

Supplemental Performance Demonstration: Eddy Current Bobbin Technique

This demonstration will use portions of "DRAFT" Regulatory Guide X.XX, "Steam Generator Tube Integrity". The main purpose of this demonstration is to validate Probability of Detection (POD) performance. These POD data will serve as input to the Edison

submittal on the assessment of the significance of eddy current indications that has been previously discussed in the cover letter.

Input data for this demonstration will include both nondestructive examination and destructive examination results from the tubes removed from Steam Generator E-089 during this present outage. These data will be the "flawed grading units" that have been evaluated against actual flaw geometry. Tube identity will be protected in Data Sets for this demonstration. Data sets will be constructed from these input data and a "pool" of more than 300 tubes removed from service during this current outage. The "pool" will provide the "unflawed grading units" to permit evaluation of POD performance.

A protocol for the supplemental demonstration will address analyst teams, analyst training and testing, and data evaluation. Edison will update the Commission on the results of this demonstration in the follow-up report discussed in the cover letter.

Investigations into Causes and Corrective Measures

An accumulation of corrosion products on the secondary-side of the tubing surfaces had been previously identified. Data from various sources indicated that such deposits might contribute to tubing corrosion. Consequently, Edison convened a panel of expert industry personnel with extensive knowledge in steam generator corrosion and water chemistry control. The panel reviewed the pertinent information and recommended that Edison chemically clean the deposits from the steam generator tubes. The deposits were removed during this refueling outage.

Chemical cleaning of the Unit 3 steam generators is planned for the April 1997 refueling outage. Existing inspection results from both units indicate that Unit 3 may lag Unit 2 by two or more fuel cycles in the onset of some of the tubing-related problems discussed above (i.e., denting and intergranular attack/stress corrosion cracking in the vicinity of the expansion of the tubing at the top-of-tubesheet).

A review of steam generator secondary-side water chemistry control strategy is ongoing for San Onofre Units 2 and 3. Edison has re-convened the expert panel of industry personnel to review new information. This thorough and balanced review will be a significant part of investigation into the cause and further corrective measures for steam generator tubing degradation. Edison will update the Commission on the progress of this review in the follow-up report discussed in the cover letter.

FIGURE 1 - Steam Generator Internal Location Reference Guide

CE MODEL 3410 TUBE SUPPORT DRAWING

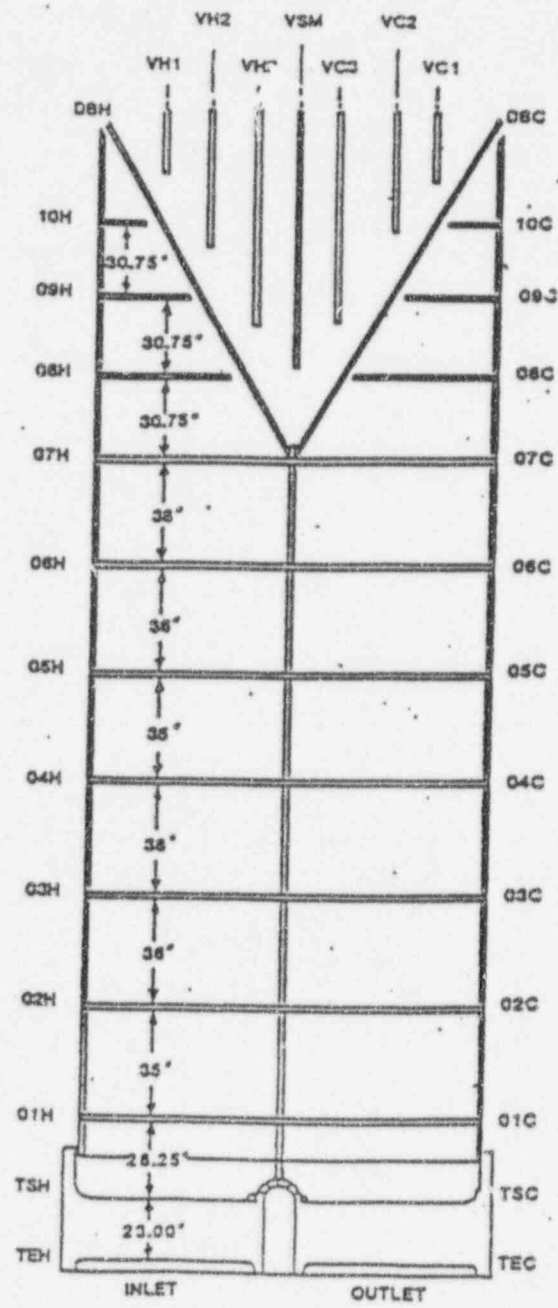


TABLE 1 - Summary of Planned Inspection Program

Steam Generator E-088 Steam Generator E-089
 Number of Tubes/Percentage of Tubes

Full length of tube with the bobbin probe	9051 / 100%	8958 / 100%
Tight radius U-bend regions with the Plus-Point Probe	24 / 20%	24 / 20%
Upper bundle freespan region (based on thermal-hydraulic condition predictions) with the Plus-Point Probe	609/20% of Region	609/20% of Region
Hot leg expansion transition at the top-of-tubesheet with the Plus-Point Probe	9051 / 100%	8958 / 100%
Cold leg expansion transition at the top-of-tubesheet with the Plus-Point Probe	655 / 7%	656 / 7%
Hot leg dents with the Plus-Point Probe	50 / 20%	39 / 20%

TABLE 2 - Summary of Significant Scope Expansion

	Steam Generator	
	E-088	E-089
	Number of Tubes/Percentage of Tubes	
Plus-Point Probe examination of upper bundle freespan (bounding of indications in 3 tubes)	None	800/Not Applicable
Plus-Point Probe examination of all hot leg dented eggcrate supports	1094 / 100%	733 / 100%

TABLE 3 - Number of Tubes Removed From Service

Indication Orientation/Location	Steam Generator	
	E-088	E-089
Mixed mode (circumferential and axial oriented indications) that intersect in the tube and are near the expansion transition at the hot leg top-of-tubesheet	0	1
Both circumferential and axial oriented indications that do not intersect and are near the expansion transition at the hot leg top-of-tubesheet	5	3
Circumferentially oriented indications near the expansion transition at the hot leg top-of-tubesheet	88	49
Axially oriented indications in the upper bundle (typically above elevation 07H), and not associated with a tube support (freespan)	0	3
As above, but located at a tube support	0	1
Axially oriented indications in the lower bundle (typically below elevation 07H), and not associated with a tube support (freespan)	5	21
Axially oriented indications at a hot leg eggcrate tube support location	2	6
Axially oriented indications at a dented hot leg eggcrate tube support location	4	4
Axially oriented indications near the expansion transition at the hot leg top-of-tubesheet	58	50
Preventive plugging of tubes adjacent to a tie rod	6	0
Indication of wear at a tube support location	2	7
Volumetric indication at a miscellaneous location in a tube	3	4
Preventive plugging based on presence of a foreign object	0	3
Highest growth rate dent	1	0
Miscellaneous preventive plugging	4	2
Total	178	154

TABLE 4 - Summary of In-Situ Hydrostatic Testing of Tubing

STEAM GENERATOR E-088

REGION	TUBE NUMBER ROW-COLUMN	LOC.	GPM LEAKAGE AT			MAX TEST PRESS
			NOPD	MSLB	POST-MSL	
Eggcrate	44-56	07H	0	0	N/A	4746
Lower bundle	11-169	Full Tube	0	0	N/A	4746
Tubesheet	52-70	TSH	0	0	N/A	5292
	53-111	TSH	0	0	N/A	4746

STEAM GENERATOR E-089

REGION	TUBE NUMBER ROW-COLUMN	LOC.	GPM LEAKAGE AT			MAX TEST PRESS
			NOPD	MSLB	POST-MSL	
Eggcrate	13-117	06H	0	0.31	0.051	3200
	92-128	02H	0	0	N/A	4746
	94-110	08H	0	0	N/A	4746
Lower bundle	16-166	Full Tube	0	0	N/A	4746
	15-15	Full Tube	0	0	N/A	4746
	23-15	Full Tube	0	0	N/A	4746
	31-17	Full Tube	0	0	N/A	4746
	82-24	Full Tube	0	0	N/A	4746
	92-34	Full Tube	0	0	N/A	4746
	106-38	Full Tube	0	0	N/A	4746
	110-42	Full Tube	0	0	N/A	4746
	112-36	Full Tube	0	0	N/A	4746
Upper bundle	122-112	Full Tube	0	0	N/A	4746
	122-120	Full Tube	0	0	N/A	4746
Tubesheet	40-56	TSH	0	0	N/A	4746
	59-79	TSH	0	0	N/A	5292
	94-86	TSH	0	0	N/A	4746

Notes:

GPM = Gallons per Minute

NOPD = Normal Operation Pressure Differential

MSLB = Main Steam Line Break Pressure Differential

N/A = Not Applicable

The Test pressure that correlates to 3 times NOPD is 4746 psi for axial flaws and 5292 psi for circumferential flaws.

9 ATTACHMENT-1

LIST OF COMPLETED ISI NDE EXAMINATIONS AND
SYSTEM PRESSURE TESTS



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
ZONE: 03								
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	B-B	B2.40	UT	0°	12/16/96	296-09IUT-029	ACCEPT
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	B-B	B2.40	UT	45°	12/16/96	296-09IUT-029	ACCEPT
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	B-B	B2.40	UT	60°	12/16/96	296-09IUT-029	ACCEPT
02-003-010	INLET NOZZLE-TO-HEAD WELD	B-D	B3.130	UT	0°	12/16/96	296-09IUT-029	ACCEPT
02-003-010	INLET NOZZLE-TO-HEAD WELD	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEPT
02-003-010	INLET NOZZLE-TO-HEAD WELD	B-D	B3.130	UT	60°	12/16/96	296-09IUT-029	ACCEPT
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	0°	12/16/96	296-09IUT-029	ACCEPT
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEPT
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	60°	12/16/96	296-09IUT-029	ACCEPT
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	UT	0°	12/16/96	296-09IUT-029	ACCEPT
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEPT
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	UT	60°	12/16/96	296-09IUT-029	ACCEPT
02-003-017	INLET NOZZLE INNER RADIUS	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEPT
02-003-018	OUTLET NOZZLE INNER RADIUS @ 45 DEGREES	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEPT
02-003-019	OUTLET NOZZLE INNER RADIUS @ 315 DEGREES	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEPT
02-003-027-01	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-02	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-03	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-04	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-05	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-06	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-027-07	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-01	PRIMARY MANWAY NUT @ 0 DEGREES	BC2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-02	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-03	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-04	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-05	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-06	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-028-07	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-01	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-02	PRIMARY MANWAY STUD @ 112 DEGREES, 30	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
MINUTES								
02-003-029-03	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-04	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-05	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-06	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-029-07	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-01	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-02	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-03	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-04	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-05	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-06	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT
02-003-030-07	PRIMARY MANWAY NUT @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEPT

ZONE: 05

02-005-001	SUPPORT SKIRT-TO-BOTTOM HEAD WELD	B-H	B8.20	UT	0	12/21/96	296-09IUT-047	ACCEPT
02-005-001	SUPPORT SKIRT-TO-BOTTOM HEAD WELD	B-H	B8.20	UT	45	12/21/96	296-09IUT-047	ACCEPT
02-005-001	SUPPORT SKIRT-TO-BOTTOM HEAD WELD	B-H	B8.20	UT	60	12/21/96	296-09IUT-047	ACCEPT
02-005-002	BOTTOM HEAD-TO-LOWER SHELL GIRTH WELD	B-B	B2.11	UT	0	12/20/96	296-09IUT-045	ACCEPT
02-005-002	BOTTOM HEAD-TO-LOWER SHELL GIRTH WELD	B-B	B2.11	UT	45	12/20/96	296-09IUT-045	ACCEPT
02-005-002	BOTTOM HEAD-TO-LOWER SHELL GIRTH WELD	B-B	B2.11	UT	60	12/20/96	296-09IUT-045	ACCEPT
02-005-003	LOWER SHELL LONGITUDINAL WELD @ 90 DGRS	B-B	B2.12	UT	0	12/20/96	296-09IUT-045	ACCEPT
02-005-003	LOWER SHELL LONGITUDINAL WELD @ 90 DGRS	B-B	B2.12	UT	45	12/20/96	296-09IUT-045	ACCEPT
02-005-003	LOWER SHELL LONGITUDINAL WELD @ 90 DGRS	B-B	B2.12	UT	60	12/20/96	296-09IUT-045	ACCEPT
02-005-009	SURGE NOZZLE-TO-BOTTOM HEAD WELD	B-D	B3.110	UT	0	12/20/96	296-09IUT-045	ACCEPT
02-005-009	SURGE NOZZLE-TO-BOTTOM HEAD WELD	B-D	B3.110	UT	45	12/20/96	296-09IUT-045	ACCEPT
02-005-009	SURGE NOZZLE-TO-BOTTOM HEAD WELD	B-D	B3.110	UT	60	12/20/96	296-09IUT-049	ACCEPT
02-005-010	SPRAY NOZZLE-TO-TOP HEAD WELD	B-D	B3.110	UT	0	12/20/96	296-09IUT-045	ACCEPT
02-005-010	SPRAY NOZZLE-TO-TOP HEAD WELD	B-D	B3.110	UT	45	12/20/96	296-09IUT-045	ACCEPT



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-005-010	SPRAY NOZZLE-TO-TOP HEAD WELD	B-D	B3.110	UT	60	12/20/96	296-09IUT-049	ACCEPT
02-005-014	SURGE NOZZLE INNER RADIUS	B-D	B3.120	UT	60	12/20/96	296-09IUT-050	ACCEPT
02-005-015	SPRAY NOZZLE INNER RADIUS	B-D	B3.120	UT	60	12/20/96	296-09IUT-050	ACCEPT
02-005-019-01	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-02	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-03	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-04	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-05	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-06	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-019-07	PRIMARY MANWAY BOLTING (STUD)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-031	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.40	UT	45	12/21/96	296-09IUT-048	ACCEPT
02-005-031	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.40	PT	N/A	12/20/96	296-09IPT-028	ACCEPT
02-005-035	SUPPORT SKIRT	F-A	F1.40B	VT3	N/A	12/21/96	296-09IVT-026	ACCEPT
02-005-037-001	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-002	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-003	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-004	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-005	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-006	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
02-005-037-007	PRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
ZONE: 05								
02-006-001	S/G # 1 INLET NOZZLE-TO-ELBOW WELD (AREA 2C5, 30' ELEV.)	B-J	B9.11	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-001	S/G # 1 INLET NOZZLE-TO-ELBOW WELD (AREA 2C5, 30' ELEV.)	B-J	B9.11	UT	60°	12/11/96	296-09IUT-014	ACCEPT
02-006-001	S/G # 1 INLET NOZZLE-TO-ELBOW WELD (AREA 2C5, 30' ELEV.)	B-J	B9.11	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-002 RV	ELBOW LONGITUDINAL WELD (BOTTOM) - RV END	B-J	B9.12	UT	45	12/21/96	296-09IUT-046	ACCEPT
02-006-002 RV	ELBOW LONGITUDINAL WELD (BOTTOM) - RV END	B-J	B9.12	MT	N/A	12/21/96	296-09IMT-010	ACCEPT
02-006-002 SG	ELBOW LONGITUDINAL WELD (BOTTOM) - S/G END	B-J	B9.12	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-002 SG	ELBOW LONGITUDINAL WELD (BOTTOM) - S/G END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-003 RV	ELBOW LONGITUDINAL WELD (TOP) - RV END	B-J	B9.12	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-003 RV	ELBOW LONGITUDINAL WELD (TOP) - RV END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-004	ELBOW-TO-PIPE WELD	B-J	B9.11	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-004	ELBOW-TO-PIPE WELD	B-J	B9.11	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-005 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-005 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEPT



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ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-006-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45°	12/11/96	296-09IUT-014	ACCEPT
02-006-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-009	DRAIN NOZZLE-TO-PIPE WELD	B-J	B9.32	MT	N/A	12/10/96	296-9IMT-006	ACCEPT
02-006-010	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.130	UT	45	12/11/96	296-09IUT-015	ACCEPT
02-006-010	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.130	PT	N/A	12/11/96	296-09IPT-008	ACCEPT
02-006-011	DRAIN NOZZLE-TO-SAFE END WELD 2"	B-F	B5.140	PT	N/A	12/11/96	296-09IPT-008	ACCEPT
ZONE: 14								
02-014-001	SAFE END-TO-PUMP SUCTION NOZZLE WELD	B-J	B9.11	UT	43	12/18/96	296-09IUT-033	ACCEPT
02-014-001	SAFE END-TO-PUMP SUCTION NOZZLE WELD	B-J	B9.11	PT	N/A	12/18/96	296-09IPT-021	ACCEPT
02-014-002	SAFE END-TO-ELBOW WELD	B-F	B5.130	UT	43	12/18/96	296-09IUT-033	ACCEPT
02-014-002	SAFE END-TO-ELBOW WELD	B-F	B5.130	PT	N/A	12/18/96	296-09IPT-021	ACCEPT
02-014-003 P	ELBOW LONGITUDINAL WELD (TOP) - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-003 P	ELBOW LONGITUDINAL WELD (TOP) - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-004 P	ELBOW LONGITUDINAL WELD (BOTTOM)-PMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-004 P	ELBOW LONGITUDINAL WELD (BOTTOM)-PMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-004 SG	ELBOW LONGITUDINAL WELD (BOTTOM)-S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-004 SG	ELBOW LONGITUDINAL WELD (BOTTOM)-S/G END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-005	ELBOW-TO-PIPE WELD	B-J	B9.11	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-005	ELBOW-TO-PIPE WELD	B-J	B9.11	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-006 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-006 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-007 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-007 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-007 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-007 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-008	PIPE-TO-ELBOW WELD	B-J	B9.11	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-008	PIPE-TO-ELBOW WELD	B-J	B9.11	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-009 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-009 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-009 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-009 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-010 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT
02-014-010 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-09IMT-007	ACCEPT
02-014-010 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEPT



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ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-014-010 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEPT
02-014-011	ELBOW-TO-ELBOW WELD	B-J	B9.11	UT	45	12/18/96	296-091UT-035	ACCEPT
02-014-011	ELBOW-TO-ELBOW WELD	B-J	B9.11	MT	N/A	12/18/96	296-091MT-007	ACCEPT
02-014-012 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-091UT-035	ACCEPT
02-014-012 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEPT
02-014-013 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-091UT-035	ACCEPT
02-014-013 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEPT

ZONE: 15

02-015-001	PUMP-TO-SAFE END WELD	B-J	B9.11	UT	43	12/18/96	296-091UT-034	ACCEPT
02-015-001	PUMP-TO-SAFE END WELD	B-J	B9.11	PT	N/A	12/18/96	296-091PT-022	ACCEPT
02-015-002	SAFE END-TO-PIPE WELD (AREA 2C10, 30' ELEV)	B-F	B5.130	UT	43	12/18/96	296-091UT-034	ACCEPT
02-015-002	SAFE END-TO-PIPE WELD (AREA 2C10, 30' ELEV)	B-F	B5.130	PT	N/A	12/18/96	296-091PT-022	ACCEPT
02-015-003 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-091UT-036	ACCEPT
02-015-003 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-008	ACCEPT
02-015-004 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-091UT-036	ACCEPT
02-015-004 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-008	ACCEPT
02-015-010	SAFETY INJECTION NOZZLE-TO-SAFE END WELD	B-F	B5.130	UT	45	12/19/96	296-091UT-039	ACCEPT
02-015-010	SAFETY INJECTION NOZZLE-TO-SAFE END WELD	B-F	B5.130	PT	N/A	12/18/96	296-091PT-022	ACCEPT

ZONE: 16

02-016-001	12" SCH 160 NOZZLE-TO PIPE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-001	12" SCH 160 NOZZLE-TO PIPE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-001	12" SCH 160 NOZZLE-TO PIPE	B-J	B9.11	PT	N/A	12/17/96	296-091PT-019	ACCEPT
02-016-004	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-004	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-004	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/17/96	296-091PT-019	ACCEPT
02-016-015	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-015	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-015	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/16/96	296-091PT-026	ACCEPT
02-016-016	12" SCH 160 PIPE-TO-NOZZLE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-016	12" SCH 160 PIPE-TO-NOZZLE	B-J	B9.11	UT	45°	12/17/96	296-091UT-032	ACCEPT
02-016-016	12" SCH 160 PIPE-TO-NOZZLE	B-J	B9.11	PT	N/A	12/16/96	296-091PT-026	ACCEPT
02-016-017	VARIABLE SPRING	F-A	F1.10C	VT3	N/A	12/21/96	296-091VT-025	ACCEPT

ZONE: 17

02-017-021	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-091UT-017	ACCEPT
02-017-021	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-091UT-017	ACCEPT
02-017-021	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/11/96	296-091PT-006	ACCEPT
02-017-022	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-091UT-017	ACCEPT
02-017-022	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-091UT-017	ACCEPT
02-017-022	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/11/96	296-091PT-006	ACCEPT
02-017-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-091UT-017	ACCEPT



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**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-017-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-006	ACCEPT
02-017-068-F	GUIDE	F-A	F1.10B	VT-3	N/A	12/13/96	296-09IVT-012	ACCEPT
02-017-068-I	GUIDE W/INTEGRALLY WELDED LUGS	BK1	B10.10	PT	N/A	12/13/96	296-09IPT-014	ACCEPT
02-017-077-F	Y-STOP	F-A	F1.10A	VT-3	N/A	12/17/96	296-09IVT-019	ACCEPT

ZONE: 18

02-018-004	12" SCH 160 VALVE-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-004	12" SCH 160 VALVE-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-004	12" SCH 160 VALVE-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-018	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-018	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-018	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-020	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-020	ACCEPT
02-018-020	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/11/96	296-09IUT-020	ACCEPT
02-018-020	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/11/96	296-09IPT-007	ACCEPT
02-018-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-023	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-024	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-025	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-026	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT



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**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-018-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-082	VARIABLE SPRING (FORMERLY 02-018-083)	F-A	F1.10C	VT-3	N/A	12/11/96	296-09IVT-008	ACCEPT
ZONE: 20								
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	UT	43	12/19/96	296-09IUT-051	ACCEPT
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	UT	45	12/19/96	296-09IUT-051	ACCEPT
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	PT	N/A	12/18/96	296-09IPT-029	ACCEPT
02-020-087-F	GUIDE & Y-STOP	F-A	F1.10B	VT-3	N/A	12/09/96	296-09IVT-006	ACCEPT
02-020-087-I	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	BK1	B10.10	PT	N/A	12/09/96	096-09IPT-002	ACCEPT
02-020-088-F	Y-STOP	F-A	F1.10A	VT-3	N/A	12/09/96	296-09IVT-006	ACCEPT
02-020-088-I	Y-STOP W/INTEGRALLY WELDED LUGS	BK1	B10.10	PT	N/A	12/09/96	096-09IPT-002	ACCEPT
ZONE: 22								
02-022-002	3" SCH 160 PIPE-TO-ELBOW	B-J	B9.21	PT	N/A	12/21/96	296-09IPT-032	ACCEPT
02-022-003	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PT	N/A	12/21/96	296-09IPT-032	ACCEPT
02-022-016	LOWER BONNET LOWER WELD (DWG NO SO23-950-148-3)	BM1	B12.40	PT	N/A	12/20/96	296-09IPT-027	ACCEPT
02-022-017	LOWER BONNET UPPER WELD (DWG NO SO23-950-148-3)	BM1	B12.40	PT	N/A	12/20/96	296-09IPT-027	ACCEPT
02-022-024	SWAY STRUT (SNUBBER REPLACED DCP 2-6683.2BP)	F-A	F1.10A	VT-3	N/A	12/13/96	296-09IVT-017	ACCEPT
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-012	ACCEPT
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-012	ACCEPT
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-012	ACCEPT
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEPT
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-012	ACCEPT
ZONE: 24								
02-024-051	SWAY STRUT	F-A	F1.10A	VT-3	N/A	12/13/96	296-09IVT-016	ACCEPT
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-022	ACCEPT
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-022	ACCEPT
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-011	ACCEPT



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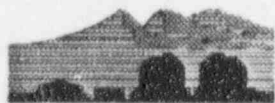
ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-024-090	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-022	ACCEPT
02-024-090	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-022	ACCEPT
02-024-090	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-011	ACCEPT
02-024-140	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45	12/19/96	296-09IUT-043	ACCEPT
02-024-140	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45	12/19/96	296-09IUT-043	ACCEPT
02-024-140	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/19/96	296-09IPT-024	ACCEPT
02-024-150	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45	12/19/96	296-09IUT-043	ACCEPT
02-024-150	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45	12/19/96	296-09IUT-043	ACCEPT
02-024-150	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/19/96	296-09IPT-024	ACCEPT
ZONE: 26								
02-026-026	2" SCH 160 PIPE-TO-TEE	B-J	B9.21	PT	N/A	12/09/96	096-09IPT-003	ACCEPT
02-026-027	2" SCH 160 TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/09/96	096-09IPT-003	ACCEPT
02-026-032	2" SCH 160 PIPE-TO-VALVE	B-J	B9.21	PT	N/A	12/09/96	096-09IPT-003	ACCEPT
02-026-034	VERTICAL SUPPORT & GUIDES	F-A	F1.10B	VT-3	N/A	12/09/96	296-09IVT-005	ACCEPT
ZONE: 28								
02-028-001	2" SCH 160 TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/19/96	296-09IPT-025	ACCEPT
02-028-017A	2" SCH 160 PIPE-TO-REDUCING TEE	B-J	B9.21	PT	N/A	12/19/96	296-09IPT-025	ACCEPT
02-028-018A	2" SCH 160 REDUCING TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/19/96	296-09IPT-025	ACCEPT
02-028-026	SNUBBER ATTACHED TO VALVE	F-A	F1.40C	VT-3	N/A	12/14/96	296-09IVT-014	ACCEPT
02-028-027	SNUBBER ATTACHED TO VALVE	F-A	F1.40C	VT-3	N/A	12/14/96	296-09IVT-014	ACCEPT
ZONE: 30								
02-030-006	REDUCER-TO-3" SCH 160 PIPE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-010	ACCEPT
02-030-007	3" SCH 160 PIPE-TO-TEE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-010	ACCEPT
02-030-011	2" SCH 160 PIPE-TO-VALVE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-010	ACCEPT
02-030-017	VARIABLE SPRING	F-A	F1.10C	VT-3	N/A	12/12/96	296-09IVT-010	ACCEPT
ZONE: 32								
02-032-001	2" SCH 160 NOZZLE-TO-PIPE	B-J	B9.21	PT	N/A	12/19/96	296-09IPT-023	ACCEPT
02-032-012	2" SCH 160 PIPE-TO-TEE	B-J	B9.21	PT	N/A	12/17/96	296-09IPT-018	ACCEPT
02-032-013	2" SCH 160 TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/17/96	296-09IPT-018	ACCEPT
02-032-024	VERTICAL SUPPORT	F-A	F1.10A	VT3	N/A	12/19/96	296-09IVT-022	ACCEPT
ZONE: 35								
02-035-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0°	12/13/96	296-09IUT-025	ACCEPT
02-035-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	12/13/96	296-09IUT-025	ACCEPT
ZONE: 36								
02-036-004	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40A	VT-3	N/A	12/14/96	296-09IVT-015	ACCEPT
02-036-005	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40A	VT-3	N/A	12/14/96	296-09IVT-015	ACCEPT
02-036-006	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40A	VT-3	N/A	12/14/96	296-09IVT-015	ACCEPT
02-036-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0°	12/13/96	296-09IUT-023	ACCEPT
02-036-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	12/13/96	296-09IUT-023	ACCEPT
02-036-015	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT
02-036-016	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT



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ISI COMPLETED EXAMINATIONS

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-036-017	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT
02-036-018	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT
02-036-019	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT
02-036-020	REACTOR COOLANT PUMP STUD	BG1	B6.180	UT	0	02/09/96	296-09IUT-010	ACCEPT
02-036-031	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-032	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-033	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-034	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-035	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-036	REACTOR COOLANT PUMP NUT	BG1	B6.200	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-080	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-081	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-082	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-083	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-084	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-085	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-086	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-087	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-088	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-089	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. S023-922-157)	BG2	B7.60	VT-1	N/A	12/09/96	296-09IVT-004	ACCEPT
02-036-112	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-113	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-114	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-115	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-116	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-117	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-118	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT



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ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-036-119	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-120	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-121	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-122	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-123	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-124	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-125	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-126	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-127	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. S023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT

ZONE: 37

02-037-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0°	12/13/96	296-09IUT-024	ACCEPT
02-037-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	12/13/96	296-09IUT-024	ACCEPT

ZONE: 38

02-038-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0	01/17/97	296-09IUT-052	ACCEPT
02-038-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	01/17/97	296-09IUT-052	ACCEPT

ZONE: 39

02-039-009	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-009	ACCEPT
02-039-010	3" SCH 160 PIPE-TO-ELBOW	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-009	ACCEPT
02-039-011	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-009	ACCEPT
02-039-012	3" SCH 160 PIPE-TO-VALVE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-009	ACCEPT
02-039-014	3" SCH 160 VALVE-TO-PIPE	B-J	B9.21	PT	N/A	12/12/96	296-09IPT-009	ACCEPT
02-039-070-F	GUIDE	F-A	F1.10B	VT-3	N/A	12/12/96	296-09IVT-011	ACCEPT

ZONE: 47

02-047-031	6" SCH 120 TEE-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-031	6" SCH 120 TEE-TO-PIPE	CF2	C5.51	MT	N/A	12/14/96	296-09IMT-009	ACCEPT
02-047-032	6" SCH 120 PIPE-TO-VALVE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-032	6" SCH 120 PIPE-TO-VALVE	CF2	C5.51	MT	N/A	12/14/96	296-09IMT-009	ACCEPT
02-047-037	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-037	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	MT	N/A	12/14/96	296-09IMT-009	ACCEPT
02-047-037A	6" SCH 120 PIPE-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-038	6" SCH 120 PIPE-TO-ELBOW	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-039	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEPT
02-047-039A	6" SCH 120 PIPE-TO-PIPE	CF2	C5.51	UT	45	12/19/96	296-09IUT-044	ACCEPT



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ISI COMPLETED EXAMINATIONS

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-047-039B	6" SCH 120 PIPE-TO-PIPE	CF2	C5.51	UT	45	12/19/96	296-09IUT-044	ACCEPT
02-047-041	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/19/96	296-09IUT-042	ACCEPT
02-047-053-F	GUIDE & Y-STOP	F-A	F1.20B	VT-3	N/A	12/07/96	296-09IVT-003	ACCEPT
02-047-053-I	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	MT	N/A	12/07/96	296-091MT-002	ACCEPT
02-047-055	GUIDE	F-A	F1.20A	VT-3	N/A	12/13/96	296-09IVT-013	ACCEPT
ZONE: 49								
02-049-019B	6" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-019B	6" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	MT	N/A	12/07/96	296-091MT-001	ACCEPT
02-049-019C	6" SCH 80 ELBOW-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-019C	6" SCH 80 ELBOW-TO-ELBOW	CF2	C5.51	MT	N/A	12/07/96	296-091MT-001	ACCEPT
02-049-019D	6" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-019E	6" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-019F	6" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-020	6" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-021	6" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-021A	6" SCH 80 PIPE-TO-VALVE STUB END	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-022	6" SCH 80 VALVE STUB END-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	ACCEPT
02-049-027-F	Y-STOP	F-A	F1.20A	VT-3	N/A	12/12/96	296-09IVT-009	ACCEPT
02-049-028-F	Y-STOP	F-A	F1.20A	VT-3	N/A	12/12/96	296-09IVT-009	ACCEPT
02-049-030-F	SNUBBERS	F-A	F1.20C	VT-3	N/A	12/12/96	296-09IVT-009	ACCEPT
ZONE: 52								
02-052-001	PENETRATION NO. 32-TO-40" REDUCING TEE	CF2	C5.51	UT	45	12/19/96	296-09IUT-041	ACCEPT
02-052-013	VALVE-TO-8" SCH 80 ELBOW	CF2	C5.51	UT	45	12/09/96	296-09IUT-027	ACCEPT
02-052-013	VALVE-TO-8" SCH 80 ELBOW	CF2	C5.51	MT	N/A	12/10/96	296-091MT-005	ACCEPT
02-052-014	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/09/96	296-09IUT-027	ACCEPT
02-052-014	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	MT	N/A	12/10/96	296-091MT-005	ACCEPT
02-052-015	8" SCH 80 PIPE-TO-PIPE	CF2	C5.51	UT	45	12/07/96	296-09IUT-008	ACCEPT
02-052-016	8" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/07/96	296-09IUT-008	ACCEPT
02-052-017	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/07/96	296-09IUT-008	ACCEPT
02-052-018	8" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-019	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-020	8" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-021	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-022	8" SCH 80 PIPE-TO-ELBOW	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-023	8" SCH 80 ELBOW-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-024	8" SCH 80 PIPE-TO-VALVE	CF2	C5.51	UT	45	12/06/96	296-09IUT-001	ACCEPT
02-052-025A	4" SWEEPOLET-TO-34" HEADER	CF2	C5.81	MT	N/A	12/09/96	296-091MT-004	ACCEPT
02-052-027	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45°	12/06/96	296-09IUT-005	ACCEPT
02-052-028	34" HEADER-TO-HEADER	CF2	C5.51	UT	45°	12/07/96	296-09IUT-006	ACCEPT
02-052-028A-SG	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEPT
02-052-028A-SV	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEPT



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-052-029	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45°	12/06/96	296-09IUT-005	ACCEPT
02-052-030	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45°	12/06/96	296-09IUT-005	ACCEPT
02-052-031	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45°	12/06/96	296-09IUT-005	ACCEPT
02-052-032	34" HEADER-TO-CAP	CF2	C5.51	UT	45°	12/06/96	296-09IUT-019	ACCEPT
02-052-032A-SG	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEPT
02-052-032A-SV	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEPT
02-052-033	6" SCH 80 PIPE-TO-HEADER EXTRUSION	CF2	C5.51	UT	45	12/07/96	296-09IUT-007	ACCEPT
02-052-035	6" PIPE-TO-6" X 1" SWAGE NIPPLE	CF2	C5.51	UT	45	12/10/96	296-09IUT-013	ACCEPT
02-052-038A-SG	LONGITUDINAL - REDUCING TEE LONG SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038A-TB	LONGITUDINAL - REDUCING TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-038B-SG	LONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038B-SV	LONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038C-SV	LONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038C-TB	LONGITUDINAL WELD - REDUCING TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-040	40" TEE-TO-TEE	CF2	C5.51	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-040	40" TEE-TO-TEE	CF2	C5.51	UT	60°	12/09/96	296-09IUT-011	ACCEPT
02-052-041A-SG	LONGITUDINAL - TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-041A-TB	LONGITUDINAL - TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-041B-SG	LONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-041B-SV	LONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-041C-SV	LONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-041C-TB	LONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEPT
02-052-042	40" REDUCING TEE-TO-26" ELBOW	CF2	C5.51	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-042A-SG	26" ELBOW BODY WELD - OUTSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-042A-SV	26" ELBOW BODY WELD - OUTSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-042B-SG	26" ELBOW BODY WELD - INSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-042B-SV	26" ELBOW BODY WELD - INSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-044	26" ELBOW-TO-HEADER	CF2	C5.51	UT	45	12/07/96	296-09IUT-003	ACCEPT
02-052-044A-SG	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/10/96	296-09IUT-012	ACCEPT
02-052-044A-SV	LONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/10/96	296-09IUT-012	ACCEPT
02-052-045	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45	12/07/96	296-09IUT-007	ACCEPT
02-052-111-F	GUIDE & Y-STOP	F-A	F1.20B	VT-3	N/A	12/07/96	296-09IVT-001	ACCEPT
02-052-111-I	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	MT	N/A	12/07/96	296-091MT-003	ACCEPT

ZONE: 65

02-065-1020-F	AXIAL STOP	F-A	F1.20A	VT-3	N/A	12/16/96	296-09IVT-018	ACCEPT
02-065-1020-I	AXIAL STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/16/96	296-091PT-015	ACCEPT
02-065-1120-F	AXIAL STOP	F-A	F1.20A	VT-3	N/A	12/16/96	296-09IVT-018	ACCEPT
02-065-1120-I	AXIAL STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/16/96	296-091PT-015	ACCEPT
02-065-1150-F	GUIDE & AXIAL STOP	F-A	F1.20B	VT-3	N/A	12/07/96	296-09IVT-002	ACCEPT
02-065-1150-I	GUIDE & AXIAL STOP W/INTEGRALLY WELDED	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
WRAPPER PLATE & LUGS								
02-065-1170-F	Y-STOP	F-A	F1.20A	VT-3	N/A	12/07/96	296-091VT-002	ACCEPT
02-065-1170-I	Y-STOP W/CURVED PLATE	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT
02-065-1220-F	GUIDE & Y-STOP	F-A	F1.20B	VT-3	N/A	12/07/96	296-091VT-002	ACCEPT
02-065-1220-I	GUIDE & Y-STOP W/INTEGRALLY WELDED WRAPPER PLATE	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT
02-065-1380-F	GUIDE & Y-STOP	F-A	F1.20B	VT-3	N/A	12/07/96	296-091VT-002	ACCEPT
02-065-1380-I	GUIDE & Y-STOP W/INTEGRALLY WELDED PLATE	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT
02-065-1390-F	AXIAL STOP	F-A	F1.20A	VT-3	N/A	12/07/96	296-091VT-002	ACCEPT
02-065-1390-I	AXIAL STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/16/96	296-091PT-015	ACCEPT
02-065-1400-F	VARIABLE SPRINGS	F-A	F1.20C	VT-3	N/A	12/07/96	296-091VT-002	ACCEPT
02-065-1400-I	VARIABLE SPRINGS W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT
ZONE: 68								
02-068-910-F	GUIDE & Y-STOP	F-A	F1.20B	VT3	N/A	12/21/96	296-091VT-024	ACCEPT
02-068-910-I	GUIDE & Y-STOP W/4 INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/21/96	296-091PT-031	ACCEPT
ZONE: 72								
02-072-137-F	Y-STOP	F-A	F1.20A	VT-3	N/A	12/10/96	296-091VT-007	ACCEPT
02-072-137-I	Y-STOP W/INTEGRALLY WELDED ATTACHMENT	C-C	C3.20	PT	N/A	12/10/96	296-091PT-005	ACCEPT
02-072-152-F	GUIDE & Y-STOP	F-A	F1.20B	VT3	N/A	12/21/96	296-091VT-023	ACCEPT
02-072-152-I	GUIDE & Y-STOP W/WELDED LUGS & CURVED PLATE	C-C	C3.20	PT	N/A	12/21/96	296-091PT-030	ACCEPT
02-072-158-F	3-WAY STOP	F-A	F1.20B	VT-3	N/A	12/10/96	296-091VT-007	ACCEPT
02-072-158-I	3-WAY STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/10/96	296-091PT-005	ACCEPT
ZONE: 75								
02-075-039	REINFORCING RING-TO-NOZZLE WELD	C-B	C2.31	PT	N/A	12/10/96	296-091PT-004	ACCEPT
02-075-040	REINFORCING RING-TO-SHELL WELD	C-B	C2.31	PT	N/A	12/10/96	296-091PT-004	ACCEPT
ZONE: 80								
02-080-001	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	44	12/19/96	296-091UT-037	ACCEPT
02-080-001	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	45	12/19/96	296-091UT-037	ACCEPT
02-080-002	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	44	12/19/96	296-091UT-037	ACCEPT
02-080-002	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	45	12/19/96	296-091UT-037	ACCEPT
02-080-003	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-091UT-037	ACCEPT
02-080-003	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-091UT-037	ACCEPT
02-080-004	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-091UT-038	ACCEPT
02-080-004	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-091UT-038	ACCEPT
02-080-005	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-091UT-038	ACCEPT
02-080-005	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-091UT-038	ACCEPT
02-080-010	INTEGRALLY WELDED ATTACHMENT	C-C	C3.10	PT	N/A	12/18/96	296-091PT-020	ACCEPT
02-080-011	INTEGRALLY WELDED ATTACHMENT	C-C	C3.10	PT	N/A	12/18/96	296-091PT-020	ACCEPT



Southern California Edison

**UNIT 2 CYCLE 9 CLASS 1 and 2
ISI COMPLETED EXAMINATIONS**

ISI ID NO.	Area Description	Cat	Item	Method	Scan Angle	Exam Date	Report No	Results
02-080-018	INTEGRALLY WELDED ATTACHMENT	C-C	C3.10	PT	N/A	12/18/96	296-09IPT-020	ACCEPT
ZONE: ST								
RCP STUD PQD				UT	0	02/09/96	296-09PUT-009	ACCEPT

UNIT 2 CYCLE 9, SYSTEM PRESSURE TESTS

SYSTEM	PLANT LOCATION	PRESSURE REQD/ACT-psi	TEMPERATURE REQD/ACT-°F	EXAM DATE
SYSTEM LEAKAGE TEST REACTOR COOLANT (1201)	RCS, INSIDE INSIDE CONTAINMENT	2250 +25 /2250 2250 +25 /2256	>280 / 335 >280 / 546	3/3/97 3/17/97
SYSTEM INSERVICE TESTS CHEMICAL AND VOLUME CONTROL (1208)	OUTSIDE CONTAINMENT	NOP / 2250-RCS	NOT / \geq 545-RCS	7/12/95
MAIN STEAM (1301)	OUTSIDE CONTAINMENT STEAM GEN. ME088/ME089	NOP / 857	NOT /499	5/30/95
MAIN FEEDWATER (1305)	OUTSIDE CONTAINMENT 2HV4052 AND 2HV4048	NOP / 1052	NOT /435	5/30/95

NOTES : 1) RCS : REACTOR COOLANT SYSTEM
2) NOP : NORMAL OPERATING PRESSURE
3) NOT : NORMAL OPERATING TEMPERATURE

10 ATTACHMENT- 2

FORM NIS-2 OWNER'S REPORTS FOR
REPAIRS OR REPLACEMENTS

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1977 Edition, S77 Addenda (Valve), 1974 Edition, S74 Addenda (Fittings), Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 93091485001
Rspec: 245-93 R1
P&ID: 40112C G-7
N-5: S2-1204-34</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|--|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1/2" Needle Type Globe Valve	Anderson-Greenwood	N70013	N/A	S21204MR435	1991	Replaced	Yes
1/2" Needle Type Globe Valve	Anderson-Greenwood	N70073	N/A	RSO 0573-93, CR-89-003	1993	Replacement	Yes
1/2" Tube-to-Pipe Adapters (2)	Parker-Hannifin	Hit Code CBCU	N/A	RSO 1529-92, SA-403 F316	N/A	Replacement	No

7. Description of Work:

The valve was replaced due to seat leakage. The tube fittings could not be reused and were also replaced.

8. Tests Conducted: System Functional Pressure Test Pressure: 1600 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks CR-89-003 reconciles the replacement valve which was certified to ASME III 2, 1983 Edition, S'85 Addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 11/21/95

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/17/94 to 11/21/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Nov. 21, 1995

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, NF, Class 2, 1974 Edition Summer, 1974 Addenda, Code Case: None</u></p> <p>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 94082138001
DCP: 2-6683.04SP
Rspec: 061-94,072-94R1,073-94R1
P&ID: 40112B
N-5: S2-1204-12</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	6777	N/A	S2-SI-038-H-039A	1980	Permanently Deleted	No
Mechanical Snubber PSA 10-6	Pacific Scientific	6776	N/A	S2-SI-038-H-039B	1980	Permanently Deleted	No
Mechanical Snubber PSA 1-4	Pacific Scientific	456	N/A	S2-SI-038-H-041	N/A	Permanently Deleted	No
Mechanical Snubber PSA 1-4	Pacific Scientific	1618	N/A	S2-SI-038-H-044A	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 1-4	Pacific Scientific	1629	N/A	S2-SI-038-H-044B	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 3-5	Pacific Scientific	2563	N/A	S2-SI-038-H-095A	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 3-5	Pacific Scientific	1601	N/A	S2-SI-038-H-095B	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 1-4	Pacific Scientific	4654	N/A	S2-SI-038-H-072A	1979	Permanently Deleted	Yes
Mechanical Snubber PSA 1-4	Pacific Scientific	4655	N/A	S2-SI-038-H-072B	1978	Permanently Deleted	Yes

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-038-5A (PSG-74) and were permanently removed in accordance with DCP 2-6683.04 SP. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/25/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/18/96 to 7/17/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date 7/17/96

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 94082140001 96031968000
DCP: 2-6683.04SP
Rspec: 062-94
P&ID: 40112B
N-5: S2-1204-12

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 2, 1974 Edition, Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	1104	N/A	S2SI038H015A	1977	Replaced	No
Mechanical Snubber PSA 1-4	Pacific Scientific	1373	N/A	S2SI038H015B	1977	Replaced	No
14" Rigid Struts (2)	Lisega	S2-SI-038-H-015	N/A	RSO 0030-95, 3932RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation PSG-74 noted in DCP 2-6683.04 SP. The Lisega type 39 rigid struts obtained for replacement installation were approximately 2" too long. The struts were modified under MO 96031958. Lisega provided a procedure (SO23-409-2-10-28) for performing field shortening of the turnbuckle portion of the rigid strut. The turnbuckles were cut and the ends were machined to obtain a 37-1/2 degree angle on each end that was 90 degrees to the turnbuckle length, as specified by the Lisega procedure. A carbon steel backing ring from A-36 strap was prepared for and inserted into the turnbuckles as weld backing, and the turnbuckles were welded using weld records WR2-96-047 & WR2-96-048. The combination WPS specified on the weld records meets the E7018 weld filler material specified by the Lisega procedure. The rigid struts were installed and the existing attachment hardware was reused. The removed snubbers were placed into the snubber rebuild program. All mechanical and welded connections were visually examined (VT-3) after installation with satisfactory results. Reference: Stress Calculation M-1204-038-5A (PSG-74).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/18/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/1/96 to 6/19/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 19, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, NF, Class 2, 1974 Edition Summer, 1974 Addenda, Code Cases: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 2
 MO: 94082254000
 DCP: 2-6683.04SP
 Rspec: 075-94
 P&ID: 40112B
 N-5: S2-1204-12

Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
57" Rigid Strut	Lisega	S2-SI-038-H-115	N/A	RSO 0030-95 3952RR1	N/A	Replacement	No
Rear Bracket w/Load Pin	Lisega	S2-SI-038-H-115	N/A	RSO 0030-95 3552RR1	N/A	Replacement	No
14" Pipe Clamp w/Studs (2)	Pacific Scientific	PS31485	N/A	RSO 0085-95 1802003-140	N/A	Replacement	No

7. Description of Work:

A new rigid strut pipe support was required per stress calculation PSG-74 noted in DCP 2-6683.04 SP. A non-ASME III-NF structural tube was attached to the existing support, S2-RC-017-H-087 using WR2-94-354. An ASME III-NF rear bracket was attached to the added tube using WR2-94-355. A Pacific Scientific clamp was attached to the 14" diameter pipe, line 2-SI-038. The rigid strut was then attached to the rear bracket and the pipe clamp as specified in the DCP. Reference: Stress Calculation M-1204-038-5A (PSG-74).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks The replacement pipe clamp assembly was certified to a higher code class, ASME III-1, NF, 1974 Edition, Summer 1974 Addenda as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/96
Owner or Owner's Designee, Title

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/11/95 to 6/19/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 19, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 95040232000
Rspec: GEN-106, R2
P&ID: 40111A
N-5: S2-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, W71 Addenda (Pump), 1980 Edition, S'82 Addenda (Seal Cartridge), Code Cases: None
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0557	N/A	S21201MP004	1977	---	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1714880-4	1170	RSO-3476-86, SO23-CART-#20	1986	Replaced	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1659057-11	1219	RSO-2320-88, SO23-CART-#25	1986	Replacement	Yes

7. Description of Work:

The RCP seal cartridge was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program. A VT-1 examination was performed on the seal housing assembly capscrews with satisfactory results. The removed seal cartridge was placed into the rebuild program.

8. Tests Conducted: System Leakage Pressure Test
See: AR 961100993-9

Pressure: NOP

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/11/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/27/96 to 06/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date June 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95060405000
Rspec: 166-95
P&ID: 40112C-(E7)
N-5: S2-1204-11 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Safety Injection and Shutdown Cooling | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S.74 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
HPSI Header Vent Valve	Anderson, Greenwood & Co.	N70023	N/A	S21204MR416	N/A	---	No
1/2" Tube Union	Parker Hannifin	Ht. Code CBEU	N/A	RSO 1675-91, P/N 8-8-HBZ-SS	N/A	Replacement	No

7. Description of Work:

Installed a tube union between valves S21204MR023 & 416 to correct external leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: 1525 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/19/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 7/3/95 to 6/19/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 19, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Chemical and Volume Control</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S' 1975 Addenda, Code Cases: None</u></p> <p style="margin-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 95060652000</p> <p>Rspec: 147-95</p> <p>P&ID: 40124B (D-3)</p> <p>N-5: S2-1208-10</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Discharge Accumulator	Greer Hydraulics Inc.	GHI-2981	234	S21208MW219	1978	---	Yes
Bladder Assembly Valve Stem	ABB Combustion Engineering	Ht. Code 34962	N/A	RSO 0008-95 SA-479 Gr. 304	N/A	Replacement	No

7. Description of Work:

The valve stem, an integral attachment to the valve bladder assembly, was replaced due to bladder leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: 2340 psig Temp: N/A

NOTE: Supplemental sheets in the 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 of this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/20/95 to 6/14/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 14, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Chemical and Volume Control</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, Summer 1975 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 95060821000
Rspec: EREF-0398
P&ID: 40124B (C-5)
N-5: S2-1208-5</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Discharge Accumulator Bladder	Greer Hydraulics	GHI-2978	231	S21208MW220	1978	---	No
Bladder Assembly Valve Stem	ABB Combustion Engineering	Ht. Code 32638	N/A	RSO 1432-95 SA-479 Gr. 304	N/A	Replacement	No

7. Description of Work:

The valve stem, an integral attachment to the valve bladder assembly was replaced due to bladder leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: 2340 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/23/95 to 6/14/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 14, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95060988001
Rspec: EREF-0377
P&ID: 40124B (G-4)
N-5: S2-1208-10 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Chemical and Volume Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S'75 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Inlet Accumulator/ Suction Stabilizer	Greer Hydraulics	GHI-2986	N/A	S21208MW246	1978	---	Yes
Valve Stem	Greer Hydraulics	GHI-11260, Heat A15701	N/A	RSO 1878-88, Part 408524 SA479 Gr. 304	N/A	Replacement	No

7. Description of Work:

The suction stabilizer for charging pump S21208MP190 was disassembled for inspection. The bladder assembly was found worn and was replaced. This included the replacement of the valve stem, which is a Code item.

8. Tests Conducted: System Functional Pressure Test Pressure: 50 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/25/95 to 6/14/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 14, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: A
MO: 95081966000
Rspec: EREF-0202
P&ID: N/A
N-5: N/A |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 3. Work Performed by: Southern California Edison Company | |
| 4. Identification of System: N/A - Spare | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S'74 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1/2" x 1/2" Relief Valve	Crosby Valve & Gage	N59371-00-0032	N/A	Spare, 027-06026	1982	---	Yes
Spindle	Crosby Valve & Gage	K65019-41-0030	N/A	RSO 0457-92, SA479 316	N/A	Replacement	No
Spring	Crosby Valve & Gage	NX2702-0077	N/A	RSO 3449-93, A313 316	N/A	Replacement	No
Spring Washers (2)	Crosby Valve & Gage	N89058-97-0867 N89058-97-0866	N/A	RSO 3449-93, SA479 316	N/A	Replacement	No

7. Description of Work:

The spare relief valve was refurbished and returned to stock. A system pressure test will be performed upon plant installation.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 12/8/95
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 9/13/95 to 12/8/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Dec. 8, 1995

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95090458000
Rspec: ASME SECTION XI DATA-0089
P&ID: 4014A (C2)
N-5: S2-1301-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Steam Generator Blowdown Processing | |

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition No Addenda, Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" 900# Control Valve	Fisher Controls	6489967	3727	2HV4053	1979	---	Yes
Primary Plug	Fisher Controls	UA6605-1, Ht. #51278-1	N/A	RSO-0855-96, SA479 316L (CR-2005-93)	1996	Replacement	Yes
Pilot Plug	Fisher Controls	RB4212-2, Ht. #501512-2	N/A	RSO-0347-94 R.1, SA479 316L (CR-2005-93)	1994	Replacement	Yes

7. Description of Work:

The valve was disassembled for inspection due to observed leakage. The valve was reassembled after replacing the primary and pilot plugs.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 961100998-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-2005-93 reconciles the replacement primary and pilot plugs which were certified to ASME III, Class 2, 1986 Edition No Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 6/7/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 09/20/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 (back)

9. Remarks : CR-2005-93 reconciles the replacement pilot plug which was certified to ASME III, Class 2, 1986 Edition
No Addenda

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 6/7/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 08/30/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95091684000
Rspec: EREF-0398
P&ID: 40124B G-3
N-5: S2-1208-5 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Chemical and Volume Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S75 Addenda, Code Cases: None</u> | |
| (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Discharge Accumulator	Greer Hydraulics	GHI-2979	232	S21208MW218	1978	---	Yes
Valve Stem	ABB Combustion Engineering	Heat 32638	N/A	RSO 1432-95, SA479 Gr. 304	N/A	Replacement	No

7. Description of Work:

The discharge accumulator for charging pump S21208MP190 was disassembled for inspection due to leakage. The bladder assembly was replaced. The assembly included the valve stem, which is a Code item.

8. Tests Conducted: System Functional Pressure Test Pressure: 2340 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/96
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 9/29/95 to 1/10/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1996

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: A. M. Miller Supervising ASME Codes Engineer Date: 6/8/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 07/18/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature C. Thompson Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95100598001
Rspec: EREF-0385
P&ID: 40123B E-6
N-5: S2-1208-14, S2-1208-11 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Chemical and Volume Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S '74 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 600 # Globe Drag Valve	Control Components	36995-1-1	N/A	2PV0201A	1984	---	Yes
Control Valve Spindle	Control Components Inc.	S-N-3 Ht. #7105H	2696	RSO 0509-93 R1 SA-479	1993	Replacement	No

7. Description of Work:

MO 95100598000 disassembled and inspected the valve internals and the spindle was replaced. MO 95100598001 reassembled the valve and performed VT-2 test.

8. Tests Conducted: System Functional Pressure Test Pressure: 322 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks Replacement Control Valve Spindle certified to ASME III, Class 2, 1974 Edition, Summer 1974 Addenda (Ref. reconciliation RSO 0509-93 Rev.1).

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/12/96
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/12/95 to 7/19/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date 7/17/96

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95111191000
Rspec: 021-96
P&ID: 40123B (E5)
N-5: S2-1208-4 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Chemical and Volume Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" Globe Valve	Control Components	36995-1-2	N/A	2PV0201B	N/A	---	Yes
2" Valve Spindle	Control Components	S/N1, Ht.#509044	N/A	RSO-0229-96, SA479, GR.316	1996	Replacement	Yes

7. Description of Work:

Replaced the valve spindle on 2PV0201B per FCN F11934M.

8. Tests Conducted: System Functional Pressure Test Pressure: 321 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 8/22/96

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/23/96 to 8/23/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date August 23, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 95111628000
Rspec: 219-95
P&ID: 40123A E-2
N-5: S3-1208-5 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Chemical and Volume Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, S.75 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3/8" 3-Valve Manifold	Gould Inc.	15153	N/A	2FT-0212	1978	Replaced	No
3/8" 3-Valve Manifold	Gould Inc.	14688	N/A	RSO-2073-84, Model 30023000	1978	Replacement	Yes

7. Description of Work:

The 3-valve manifold upstream of Instrument 2FT-0212 was replaced due to valve seat leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: 2350 psig Temp: N/A

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in lists 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

[Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 6/12/96

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/6/95 to 6/14/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 14, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Chemical and Volume Control</p> | <p>Unit: 2
MO: 95120527000
Rspec: EREF-0013
P&ID: 40124B (E-2)
N-5: S2-1208-5</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|--|---|
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda, Code Cases: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3/4" 1500# SS Globe Valve (BW)	Kerotest	GAX2-23	N/A	S21208MR221	1981	---	Yes
Disc (Stellite Hardface)	Kerotest	ARP17-23	N/A	RSO-2779-90, SA479 GR.316	1990	Replacement	Yes

7. Description of Work:

Replaced valve disc to correct leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: 2343 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : The replacement disc was certified to a higher code class, ASME III-1, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 8/22/96

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/2/96 to 8/23/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date August 23/996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030073000
Rspec: ASME SECTION XI DATA-0173
P&ID: 40111B (G5)
N-5: S2-1201-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1974 Edition No Addenda (Valve); Class 1, 1974 Edition 1974 Addenda (Flange bolting); Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6"x 8" Safety Valve	Dresser	BS-03209	N/A	2PSV0200 (to be rebuilt on MO 96120419)	1978	Replaced	Yes
6"x 8" Safety Valve	Dresser	BS-03210	N/A	RSO-0605-96, Trav.# 96-83	1978	Replacement	Yes
2"-8 Flange Studs (8)	Nova Machine Products	Ht. Code K6Q	N/A	RSO-1931-93, SA193 Gr.B7	N/A	Replacement	No
2"-8 Flange Nuts (16)	Nova Machine Products	Ht. Code K7M	N/A	RSO-1869-93, SA194 Gr.7	N/A	Replacement	No

7. Description of Work:

The pressurizer safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the flange bolting was also replaced. A VT-1 examination was performed on the replacement flange bolting with satisfactory results. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
See: AR 961100993-14

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/2/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/11/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature Nat: Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030120000
Rspec: ASME SECTION XI DATA-0173
P&ID: 40111B (G5)
N-5: S2-1201-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1974 Edition No Addenda (Valve); Class 1, 1974 Edition 1974 Addenda (Flange bolting); Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6"x 8" Pressurizer Safety Valve	Dresser	BU06254	N/A	2PSV0201 (to be rebuilt on MO 96120419)	1980	Replaced	Yes
6"x 8" Pressurizer Safety Valve	Dresser	BS-03211	N/A	RSO-0604-96, Trav.# 96-84	1978	Replacement	Yes
2"-8x 14 1/2" Stud (6)	Nova Machine Products	Ht.# 89712 K7K	N/A	RSO-1638-93, SA193 Gr.B7	N/A	Replacement	No
2"-8x 14 1/2" Stud (2)	Nova Machine Products	Ht.# 89712 K6Q	N/A	RSO-1931-93, SA193 Gr.B7	N/A	Replacement	No
2"-8 Nuts (7)	Nova Machine Products	Ht.Code T7208 K4H	N/A	RSO-1415-93, SA194 Gr.7	N/A	Replacement	No
2"-8 Nuts (9)	Nova Machine Products	Ht.Code T7208 V5N	N/A	RSO-0246-95, SA194 Gr.7	N/A	Replacement	No

7. Description of Work:

The pressurizer safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the flange bolting was also replaced. A VT-1 examination was performed on the replacement flange bolting with satisfactory results. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
 See: AR 961100993-14

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 6/7/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/11/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030150000
Rspec: ASME SECTION XI DATA-0187
P&ID: 40141D (G6)
N-5: S2-1301-1 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition Summer 1974 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6"x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-00-0021	N/A	2PSV8403	1977	Replaced	Yes
6"x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0003	N/A	RSO-0894-96	1976	Replacement	Yes
1-3/8"- 8 Heavy Hex Nuts (12)	Nova Machine Products	Ht # 65162, Ht. Code Z2N	N/A	RSO-1421-95, SA194 Gr. 7 (CR-2001-93), SEE-92-0065	N/A	Replacement	No

7. Description of Work:

The main steam safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation 12 inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
 See: AR 961100998-1

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AJA.

FORM NIS-2 (back)

9. Remarks : CR-2001-93 reconciles the replacement inlet nuts which were certified to ASME III, Class 2 1989 Edition No Addenda. SEE No. 92-0065 allows for the replacement of Gr.2H with Gr.7.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/8/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 08/02/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 (back)

9. Remarks : CR-2001-93 reconciles the replacement inlet nuts which were certified to ASME III, Class 2 1989 Edition No Addenda. SEE No. 92-0065 allows for the replacement of Gr.2H with Gr.7.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/13/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 08/02/96 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature

[Signature]

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030199000
Rspec: ASME SECTION XI DATA-0185
P&ID: 40141C (G7)
N-5: S2-1301-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2 1974 Edition Summer 1974 Addenda Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-0019	N/A	2PSV8410	1977	Replaced	Yes
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-01-0002	N/A	2PSV8410	1976	Replacement	Yes
1-3/8"D x 8 Heavy Hex Nut (12)	Cardinal Industrial Products	Ht. Code E2	N/A	RSO-1171-93, SA194 Gr.7,SEE-92-0065	N/A	Replacement	No

7. Description of Work:

The main steam safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : SEE No. 92-0065 allows for the replacement of Gr. 2H with Gr. 7.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 07/30/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030210000
Rspec: ASME SECTION XI DATA-0187
P&ID: 40141C (G6)
N-5: S2-1301-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2 1974 Edition Summer 1974 Addenda; Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-0024	N/A	2PSV8412	1977	Replaced	Yes
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-01-0023	N/A	2PSV8412	1978	Replacement	Yes
1-3/8 "D x 8 Heavy Hex Nut (12)	Cardinal Industrial Products	Ht. Code E2	N/A	RSO-1171-93, SA194 Gr.7; SEE-92-0065	N/A	Replacement	No

7. Description of Work:

The main steam safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : SEE No. 92-0065 allows for the replacement of Gr. 2H with Gr.7 (inlet nuts).

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 07/30/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Main Steam</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition Summer 1974 Addenda; Code Cases: None</u></p> <p style="margin-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96030229000</p> <p>Rspec: ASME SECTION XI DATA-0192</p> <p>P&ID: 40141C (G3)</p> <p>N-5: S2-1301-2</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-0030	N/A	2PSV8417	1977	Replaced	Yes
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-0006	N/A	2PSV8417	1976	Replacement	Yes
1-3/8"D x 8 Heavy Hex Nut (12)	Cardinal Industrial Products	Ht. Code E2	N/A	RSO-1171-93, SA194 Gr. 7; SEE-92-0065	N/A	Replacement	No

7. Description of Work:

The main steam safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the A.I.A.

FORM NIS-2 (back)

9. Remarks : SEE No. 92-0065 allows for the replacement of Gr. 2H with Gr.7 (inlet nuts).

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/20/97

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 07/30/96 to 01/21/97 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030233000
Rspec: ASME SECTION XI DATA-0193
P&ID: 40141C (G3)
N-5: S2-1301-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition Summer 1974 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-31	N/A	2PSV8418	1977	Replaced	Yes
6" x 10" Safety Relief Valve	Crosby Valve & Gage	N58737-00-36	N/A	2PSV8418	1977	Replacement	Yes
1-3/8"D x 8 Heavy Hex Nut (12)	Cardinal Industrial Products	Ht. Code E2	N/A	RSO-1171-93, SA194 Gr. 7; SEE-92-0065	N/A	Replacement	No

7. Description of Work:

The main steam safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation the inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : SEE No. 92-0065 allows for the replacement of Gr. 2H with Gr.7 (inlet nuts).

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 07/30/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96030964000 96121941000 96121945000
Rspec: 124-96, ASME XI DATA-0033
P&ID: 40112B (G2)
N-5: S2-1204-12 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Safety Injection and Shutdown Cooling | |

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identifier	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
10" 300# Globe Stop Check Valve	Anchor/Darling	2N-1114	N/A	S21204MU024	1977	---	Yes
Disc	Anchor/Darling	S/N 1, Ht.#J6687	N/A	RSO-1305-96, SA182 Gr. F316	1996	Replacement	Yes
Disc	Anchor/Darling	Original Disc w/2N-1114	N/A	Original Disc removed under MO 96030964	1977	Replacement	Yes

7. Description of Work:

Replaced valve disc with new style disc skirt design to correct leakage under MO 96030964000. Additionally, the tack welds used to lock the threaded joint between the disc and the disc skirt on the original disc were cracked. Flow testing following new disc installation indicated excessive pressure drop across the valve. The original disc was subsequently reinstalled under MO 96121941000. Four new tacks were added in accordance with WR2-96-377, Repair Specification 124-96 and MO 96121945000.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A

See: AR 961100995-1

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/7/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/5/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Reactor Coolant

Unit: 2
MO: 96031222000
FCN: F12124M, F12127M, F12128M
Rspec: ASME SECTION XI DATA-0175
P&ID: 40111D
N-5: S2-1201-3-7

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition Summer 1973 Addenda; Code Case: 1649
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
4" 2500# Control Valve	Hammel-Dahl Conoflow	94/5797/001	N/A	2PV0100A	1978	---	Yes
Upper Bonnet Bellows Assembly	Anchor/Darling	ET455-1-4	N/A	RSO-1473-96 & RSO-1907-93	1993	Replacement	Yes
Valve Plug	Anchor/Darling	Ht.# 40579, Tr. Code A858	N/A	RSO-1473-96, SA479 Tp.316	1993	Replacement	Yes
1 1/8"x 5 3/8" Upper Bonnet Studs (8)	Vitco Nuclear Products	Ht.# 500389, Tr. Code NAF	N/A	RSO-1473-96, SA453 660B	N/A	Replacement	No
1 1/8" - 8 Body Stud Nuts (8)	Hammel-Dahl Conoflow	S/N N21-1, Ht. #824316	N/A	RSO2-P-855-83, SA194 Gr.8F	N/A	Replacement	No

7. Description of Work:

The upper bonnet bellows assembly (including the valve plug and upper bonnet studs) and the body stud nuts were replaced. Reference: FCN F12124M, F12127M and F12128M.

8. Tests Conducted: System Leakage Pressure Test
See: AR 961100993-17

Pres: NOP

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-2004-93 reconciles the replacement Upper Bonnet Bellows Assembly which was certified to ASME III, Class 1, 1977 Edition, No Addenda. Reference: RSO-1907-93 for original receiving inspection of Upper Bonnet Bellows Assembly.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/06/96 to 06/12/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 12, 1997

FORM NIS-2 (back)

9. Remarks : CR-2004-93 reconciles the replacement Upper Bonnet Bellows Assembly which was certified to ASME III, Class 1, 1977 Edition No Addenda. Reference: RSO-3387-93 for original receiving inspection of Upper Bonnet Bellows Assembly.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/06/96 to 06/12/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 12, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition Summer 1974 Addenda, Code Case: None</u></p> <p>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96031765000</p> <p>Rspec: ASME SECTION XI DATA-0207</p> <p>P&ID: 40112D</p> <p>N-5: S2-1201-4</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|--|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 8" Relief Valve	Crosby Valve & Gage	N60061-00-0003	N/A	2PSV9349	1980	Replaced	Yes
6" x 8" Relief Valve	Crosby Valve & Gage	N60061-00-0004	N/A	MO 95010657 Tested Spare	1984	Replacement	Yes

7. Description of Work:

The relief valve was replaced as a scheduled preventative maintenance action with a tested spare. The removed valve was placed in the rebuild program.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 961100993-11

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 5/3/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/03/96 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/27/96 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1975 Addenda, Code Cases: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 2
 MO: 96032632001, 96032632000
 Rspec: EREF-0377
 P&ID: 40124B (B6)
 N-5: S2-1208-10
 Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Inlet Accumulator/Suction Stabilizer	Greer Hydraulics, Inc.	2984	N/A	S21208MW248	1978	---	Yes
Accumulator Bladder Assembly	Greer Hydraulics, Inc.	Ht. Code 1G9316 SA479/304	N/A	RSO 0042-96	N/A	Replacement	No

7. Description of Work:

Replaced the inlet accumulator bladder assembly due to bladder leakage. MO 96032632000 performed bladder replacement. MO 96032632001 performed the VT-2 system pressure test.

8. Tests Conducted: System Functional Pressure Test Pressure: 51 psi Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/12/96
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/12/96 to 6/19/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date June 19, 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033361000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40111A
N-5: S2-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	25777	N/A	S2RC01SH001N	1986	Permanently Deleted	No
Mechanical Snubber PSA 1-4	Pacific Scientific	11126	N/A	S2RC01SH001S	1980	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-165-AA (PSG-249) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

Unit: 2
MO: 96033362000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40111B
N-5: S2-1201-3

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	30483	N/A	S2RC147H001B	1986	Permanently Deleted	No
Mechanical Snubber PSA 3-5	Pacific Scientific	30713	N/A	S2RC147H001T	1991	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-165-AA (PSG-249) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033363000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112C
N-5: S2-1204-32

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	25764	N/A	S2SI165H006	1986	Permanently Deleted	No
Mechanical Snubber PSA 1-2 - 1-1/2	Pacific Scientific	20355	N/A	S2SI165H007B	1986	Permanently Deleted	No
Mechanical Snubber PSA 1-2 - 1-1/2	Pacific Scientific	7449	N/A	S2SI165H007T	1979	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-165-AA (PSG-249) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information at items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/31/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section III

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033368000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112D
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NE, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 35-6	Pacific Scientific	3042	N/A	S2SI043H020	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 100-6	Pacific Scientific	124	N/A	S2SI043H021	N/A	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-043-2A (PSG-78) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
 Owner or Owner's Designee, Title

Date: 1/20/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/05/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
 Inspector's Signature

Commissions 1862 California
 National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033369000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112C
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	25771	N/A	S2SI152H001	1981	Permanently Deleted	No

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-043-2A (PSG-78) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128

Unit: 2
 MO: 96033371000
 DCP: 2-6683.05SP
 Rspec: 016-96
 P&ID: 40113A
 N-5: S2-1204-5

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	4703	N/A	S2SI043H016	1978	Replaced	Yes
36 3/8" Rigid Strut	Lisega	S2-SI-043-H-016	N/A	RSO-0882-96, 3962RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. The existing attachment hardware was reused. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-043-2A (PSG-78).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/9/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/05/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033372000
DCY: 2-6683.05SP
Rspec: 017-96
P&ID: 40112D
N-5: S2-1204-6

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	7580	N/A	S2SI043H018A	1980	Replaced	No
32" Rigid Strut	Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3962RR1	N/A	Replacement	No
Rear Bracket (2)	Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3562RR1	N/A	Replacement	No
Load Pins (2)	Lisega	Ht. Code Z533	N/A	RSO-0882-96, SA479 Tp.410	N/A	Replacement	No
Mechanical Snubber PSA 10-6	Pacific Scientific	17963	N/A	S2SI043H018B	1991	Replaced	No
32" Rigid Strut	Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3962RR1	N/A	Replacement	No
Rear Bracket (2)	Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3562RR1	N/A	Replacement	No
Load Pins (2)	Lisega	Ht. Code Z533	N/A	RSO-0882-96, SA479 Tp.410	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The rear brackets and load pins were also replaced. Installation and NDE was performed using weld record WR2-96-068. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-043-2A (PSG-78).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/08/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033373000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113A
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 35-6	Pacific Scientific	4238	N/A	S2SI059H009	1979	Replaced	Yes
28" Rigid Strut	Lisega	S2-SI-059-H-009	N/A	RSO-0882-96, 3972RR1	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-043-2A (PSG-78).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Appendix Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/05/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda, Code Case: None</u></p> <p>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96033440000</p> <p>Rspec: ASME SECTION XI DATA-0035</p> <p>P&ID: 40112A (E3)</p> <p>N-5: S2-1204-34</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|--|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
4" 900# Globe Stop Check Valve (BW)	Anchor/Darling	2N766	N/A	S21204MU016	1977	---	Yes
Disc	Anchor/Darling	S/N 5; Ht. #506138	N/A	RSO-0049-95, SA479 Tp.316	1994	Replacement	Yes

7. Description of Work:

The disc from the valve in plant position S21204MU016 was replaced.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 961100995-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturers Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
 Owner or Owner's Designee, Title

Date: 6/7/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/15/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033461000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113A
N-5: S2-1204-4

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	3174	N/A	S2SI044H001	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 10-6	Pacific Scientific	17977	N/A	S2SI044H004	1991	Permanently Deleted	No
Mechanical Snubber PSA 35-6	Pacific Scientific	1316	N/A	S2SI044H006	1978	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-044-2A (PSG-47) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/07/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033475000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113A
N-5: S2-1204-4

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Spring Hanger	Grinnell Co. Inc.	S2-SI-044-H-008	N/A	S2SI044H008	N/A	Permanently Deleted	No

7. Description of Work:

The spring hanger was no longer required per the latest pipe stress calculation M-1204-044-2A (PSG-47) and was permanently removed in accordance with DCP 2-6683.05SP. The removed spring hanger was placed into the rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

FORM NIS-2 (Back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the A.S.M.E 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96033494000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113A
N-5: S2-1204-4

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 35-6	Pacific Scientific	2811	N/A	S2SI044H003	1978	Replaced	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	3066	N/A	S2SI044H009	1978	Replaced	Yes
54 1/8" Rigid Strut	Liseqa	S2-SI-044-H003	N/A	RSO-0882-96, 3972 RR1S	N/A	Replacement	No
45 1/4" Rigid Strut	Liseqa	S2-SI-044-H009	N/A	RSO-0882-96, 3972 RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. A VT-3 examination of the support assemblies was performed after installation. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-044-2A (PSG-47).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/9/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/05/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|---|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None</u></p> <p>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 96033531000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112D
N-5: S2-1204-2</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	2468	N/A	S2SI045H005 ✓	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	2968	N/A	S2SI045H011 ✓	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	3130	N/A	S2SI045H013 ✓	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	957	N/A	S2SI045H015A ✓	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	10900	N/A	S2SI045H015B ✓	1983	Permanently Deleted	No
Mechanical Snubber PSA 35-6	Pacific Scientific	4025	N/A	S2SI045H018A ✓	1979	Permanently Deleted	No
Mechanical Snubber PSA 35-6	Pacific Scientific	4026	N/A	S2SI045H018B ✓	1979	Permanently Deleted	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38701	N/A	S2SI045H028E ✓	1992	Permanently Deleted	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	13744	N/A	S2SI045H028N ✓	1980	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-045-2A (PSG-281) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Test Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/13/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96033827000
Rspec: ASME SECTION XI DATA-0035
P&ID: 40112A (G2)
N-5: S2-1204-34 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Safety Injection and Shutdown Cooling | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda</u> ; Code Case: <u>None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
4" 900# Globe Stop Check Valve	Anchor/Darling	2N822	N/A	S21204MU012	1977	---	Yes
Disc	Anchor/Darling	S/N 6, Ht.#506138	N/A	RSO-0049-95, SA479 Tp 316	1994	Replacement	Yes

7. Description of Work:

The valve disc was replaced due to leakage.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 961100995-4

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: _____
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/11/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 18162 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|--|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Bechtel Construction Company
P. O. Box 450
San Clemente, CA 92674-0128</p> <p>4. Identification of System: Reactor Coolant</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class I, 1971 Edition, Summer 1971 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> <p>6. Identification of Components Repaired or Replaced and Replacement Components:</p> | <p>Unit: 2
CWO: 96033981000
Rspec: GEN-105 R1
P&ID: 40141A
N-5: S2-1201-3</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|--|---|

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" 8N-2A Manway Stud (1)	ABB Combustion Engineering	Ht.# 40545	N/A	RSO-1691-95, SA540 Gr.B24	N/A	Replacement	No
1 1/2" 8N-2B Manway Stud Nut (1)	ABB Combustion Engineering	Ht.# J6765-1	N/A	RSO-3440-85, SA193 Gr.B7	N/A	Replacement	No

7. Description of Work:

The steam generator manway studs and nuts were removed and examined. All manway studs and nuts were acceptable for reuse with the exception of stud number 14, and nut number 5, which were replaced. A VT-1 examination was performed on the replacement stud and nut with satisfactory results.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 961100993-12

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 4/10/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/02/96 to 04/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date April 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96040025000
Rspec: GEN-106, R2
P&ID: 40111A
N-5: S2-1201-3 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1971 Edition, W71 Addenda (Pump), 1980 Edition, S'82 Addenda (Seal Cartridge), Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0558	N/A	S21201MP001	1977	---	Yes
Mechanical Seal Cartridge	Bingham - Willamette	1714880-1	1169	RSO-3476-86, SO23-CART-#19	1986	Replaced	Yes
Mechanical Seal Cartridge	Bingham - Willamette	1714880-8	1168	RSO-2779-86, SO23-CART-#18	1986	Replacement	Yes

7. Description of Work:

The RCP seal cartridge was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program. A VT-1 examination was performed on the seal housing assembly capscrews with satisfactory results. The removed seal cartridge was placed into the rebuild program.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
 See: AR 961100993-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner of Owner's Designee, Title

Date: 6/10/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/22/96 to 6/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040311000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112D
N-5: S2-1204-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	3435	N/A	S2SI045H008	1978	Replaced	Yes
39 7/8" Rigid Strut	Liseaga	S2-SI-045-H-008	N/A	RSO-882-96, 3962 RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-045-2A (PSG-281).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128

Unit: 2
 MO: 96040329000
 DCP: 2-6683.05SP
 Rspec: 015-96
 P&ID: 40112D
 N-5: S2-1204-2

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	4142	N/A	S2SI046H002	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 10-6	Pacific Scientific	4387	N/A	S2SI046H003	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	1324	N/A	S2SI046H012	1978	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-046-2A (PSG-67) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040351000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113B
N-5: S2-1204-2

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	2596	N/A	S2SI062H002	1977	Permanently Deleted	Yes
Mechanical Snubber PSA 35-6	Pacific Scientific	1342	N/A	S2SI062H005	1978	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-046-2A (PSG-67) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section V

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040352000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112C
N-5: S2-1204-2

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	4421	N/A	S2SI155H001	1978	Permanently Deleted	Yes

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-046-2A (PSG-67) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/07/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040354000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113B
N-5: S2-1204-2

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	4133	N/A	S2SI046H006	1978	Replaced	Yes
54 5/16" Rigid Strut	Lisega	S2-SI-046-H-006	N/A	RSO-0882-96, 3952RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-046-2A (PSG-67).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040356000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40111A
N-5: S2-1204-2

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 35-6	Pacific Scientific	1328	N/A	S2SI046H010	1978	Replaced	No
29 1/2" Rigid Strut	Lisega	S2-SI-046-H-010	N/A	RSO-0882-96, 3972RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-046-2A (PSG-67).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this ref acement conforms to the rules of the ASME Code, Section XI. ref air or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/15/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/22/96 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date MAY 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section II

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company

Unit: 2
MO: 96040943000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113B
N-5: S2-1204-2

4. Identification of System: Safety Injection and Shutdown Cooling

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda. Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 35-6	Pacific Scientific	12730	N/A	S2SI062H001	1986	Replaced	No
30 1/16" Rigid Strut	Lisega	S2-SI-062-H-001	N/A	RSO-0882-96, 3972RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. A VT-3 examination of the support assembly was performed after installation. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-046-2A (PSG-67).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
 Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Insr ectors and the State or Province of California, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040946000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113A
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38638	N/A	S2SIO63H022	1991	Permanently Deleted	No

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-063-2A (PSG-245) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/08/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature (National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section III

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91777

Unit: 2
MO: 6040947000
DCP: 2-6683.055P
Rspec: 015-96
P&ID: 40113A
N-5: S2-1204-10

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 2, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	36666	N/A	S2SI067H002	1984	Permanently Deleted	Yes

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-063-2A (PSG-245) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/4/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/08/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040948000
DCP: 2-6683.05SP
Rspec: 018-96
P&ID: 40113A
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	36645	N/A	S2SI063H018	1984	Replaced	Yes
25" Rigid Strut	Lisega	S2-SI-063-H-018	N/A	RSO-0882-96, 3922RR1	N/A	Replacement	No
Rear Brackets w/Load Pins (2)	Lisega	S2-SI-063-H-018	N/A	RSO-0882-96, 3522RR1	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with a rigid strut in accordance with DCP 2-6683.05SP and FIDCN M-10308. The rear brackets and load pins were also replaced. Installation and NDE was performed using weld record WR2-96-069. The removed snubber was placed into the snubber rebuild program. Reference: Stress Calculation M-1204-063-2A (PSG-245)

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/03/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040949000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113A
N-5: S2-1204-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition, Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38648	N/A	S2SI063H020	1991	Replaced	No
18 7/16" Rigid Strut	Lisega	S2-SI-063-H-020	N/A	RSO-0882-96, 3922RR1	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	8243	N/A	S2SI063H023	1979	Replaced	No
11 7/16" Rigid Strut	Lisega	S2-SI-063-I-023	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-063-2A (PSG-245).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the A.I.A.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/08/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040950000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113A
N-5: † S2-1204-4

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	8244	N/A	S2SI064H020	1979	Permanently Deleted	No

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-064-AA (PSG-308) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/08/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|--|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda</u>; Code Cases: <u>None</u></p> <p style="padding-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96040951000</p> <p>DCP: 2-6683.05SP</p> <p>Rspec: 016-96</p> <p>P&ID: 40113A</p> <p>N-5: S2-1204-4</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|--|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	3254	N/A	S2SI064H007	1977	Replaced	Yes
11 3/8" Rigid Strut	Lisega	S2-SI-064-H-007	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	3995	N/A	S2SI064H013	1977	Replaced	Yes
11 5/16" Rigid Strut	Lisega	S2-SI-064-H-013	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	1259	N/A	S2SI064H019	1977	Replaced	Yes
10 1/8" Rigid Strut	Lisega	S2-SI-064-H-019	N/A	RSO-0882-96, 3922RR1	N/A	Replacement	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	20702	N/A	S2SI064H030	1992	Replaced	No
9 3/4" Rigid Strut	Lisega	S2-SI-064-H-030	N/A	RSO-0882-96, 3922RR1	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-064-AA (PSG-308).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None</u></p> <p style="padding-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96040953000</p> <p>DCP: 2-6683.05SP</p> <p>Rspec: 015-96</p> <p>P&ID: 40113B</p> <p>N-5: S2-1204-2</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4095	N/A	S2SI066H005	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4998	N/A	S2SI066H013	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4036	N/A	S2SI066H015	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	5021	N/A	S2SI066H018	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4583	N/A	S2SI066H022	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	36674	N/A	S2SI066H025	1984	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	13928	N/A	S2SI066H025	1980	Permanently Deleted	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4688	N/A	S2SI066H028	1978	Permanently Deleted	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38705	N/A	S2SI066H030	1992	Permanently Deleted	No

7. Description of Work:

The mechanical snubbers were no longer required per the latest pipe stress calculation M-1204-066-2A (PSG-327) and were permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040957000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40113C
N-5: S2-1204-9

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38687	N/A	S3SI074H002	1992	Permanently Deleted	No

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-066-2A (PSG-327) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/9/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/08/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|---|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, NF, Class I, 1974 Edition Summer 1974 Addenda; Code Cases: None</u></p> <p style="padding-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 96040958000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40113B
N-5: S2-1204-2</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	36653	N/A	S2SI066H010	1984	Replaced	Yes
12 7/16" Rigid Strut	Lisega	S2-SI-066-H-010	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4260	N/A	S2SI066H024	1978	Replaced	Yes
27 1/4" Rigid Strut	Lisega	S2-SI-066-H-024	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	36681	N/A	S2SI066H032	1984	Replaced	Yes
12 1/4" Rigid Strut	Lisega	S2-SI-066-H-032	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-066-2A (PSG-327).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/8/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Inspector's Signature Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040959000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112C
N-5: S2-1204-13

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 2, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	9563	N/A	S2SI087H019	1979	Permanently Deleted	Yes

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-167-AA (PSG-186) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturers Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040963000
DCP: 2-6683.05SP
Rspec: 015-96
P&ID: 40112C
N-5: S2-1204-31

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda, Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	37405	N/A	S2SI168H001	1986	Permanently Deleted	No

7. Description of Work:

The mechanical snubber was no longer required per the latest pipe stress calculation M-1204-168-AA (PSG-341) and was permanently removed in accordance with DCP 2-6683.05SP. The attachment hardware was left in-place. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this deletion conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/20/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/14/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96040965000
DCP: 2-6683.05SP
Rspec: 016-96
P&ID: 40112C
N-5: S2-1204-31

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, NF, Class 1, 1974 Edition Summer 1974 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	37511	N/A	S2SI168H002	1986	Replaced	No
35 1/8" Rigid Strut	Liseega	S2-SI-168-H-002	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	5043	N/A	S2SI168H003	1978	Replaced	Yes
12 9/16" Rigid Strut	Liseega	S2-SI-168-H-003	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced with rigid struts in accordance with DCP 2-6683.05SP. The existing rear brackets were reused. The removed snubbers were placed into the snubber rebuild program. Reference: Stress Calculation M-1204-168-AA (PSG-341).

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/20/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/18/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda</u>; Code Case: <u>None</u></p> <p>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96041150000 96121943000 96121944000</p> <p>Rspec: 125-96, ASME XI DATA-0033</p> <p>P/t ID: 40112B (E3)</p> <p>N-5: S2-1204-12</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|---|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
10" 300# Globe Stop Check Valve	Anchor/Darling	2N-1125	N/A	S21204MU025	1977	---	Yes
Disc	Anchor/Darling	S/N 3, Ht.#J6687	N/A	RSO-1305-96, SA182 Gr.F316	1996	Replacement	Yes
7/8"- 9x 4" Bonnet Studs (8)	Vitco Nuclear Products	Ht.# 09303	N/A	RSO-2830-87, SA564, Gr.630-1100	N/A	Replacement	No
7/8"- 9 Heavy Hex Nuts (2)	Cardinal Industrial Products	Trace Code F1	N/A	RSO-3131-92, SA194 Gr.8M (CR-3007-96)	N/A	Replacement	No
Disc	Anchor/Darling	Original Disc w/2N-1125	N/A	Original Disc removed under MO 96041150	1977	Replacement	Yes

7. Description of Work:

Replaced valve disc with new style disc skirt design to correct leakage under MO 96041150000. Additionally, the tack welds used to lock the threaded joint between the disc and the disc skirt on the original disc were cracked. Flow testing following new disc installation indicated excessive pressure drop across the valve. The original disc was subsequently reinstalled under MO 96121943000. Four new tacks were added in accordance with WR2-96-378, Repair Specification 125-96 and MO 96121944000.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 960201284-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the ALA.

FORM NIS-2 (back)

9. Remarks : CR-3007-96 reconciles the replacement nuts which were certified to ASME III, Class 2, 1974 Edition Summer 1974 Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/8/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/05/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control

Sheet 1 of 1
Unit: 2
MO: 96062131000
FCN: F13044M, F13045M
Rspec: 091-96, ASME XI DATA-0291
P&ID: 40124B (G2)
N-5: S2-1208-5 & 11

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Ed.; Summer 1973 Add. (Valve); ASME Section III, Class 2, 1974 Ed.; Summer 1974 Add. (Pipe Nipple & Installation); Code Case: None
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda; 1992 Edition, No Addenda (NDE & VT-2); Code Case: N-416-1
6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" Check Valve	Kerotest	EE7-12	N/A	S21208MU067	1976	Replaced	Yes
2" 1500# SS Check Valve	Kerotest	AJ02-21	N/A	RSO-0794-86, Part #72598055	1986	Replacement	Yes
2" NPS SCH. 160 Pipe Nipple	Consolidated Power Supply	Ht.# SW 768	N/A	RSO-3480-93, SA376 TP316	N/A	Replacement	No

7. Description of Work:

The check valve located in plant position S21208MU067 was scheduled to be replaced. The replacement valve was a different model valve that was 5/8" shorter than the original valve. Subsequently, the pipe nipple immediately upstream from the valve also required replacement. The replacement valve was defined by ASME XI DATA FLAG - 0291. The installation was performed in accordance with weld records WR2-96-295, WR2-96-300 and WR2-96-301 and the provisions of Repair Specification 091-96.

8. Tests Conducted: System Leakage Pressure Test Pres: NOP Temp: N/A
See: AR 960600673

This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-line)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 3/30/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/7/96 to 4/1/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date April 1, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96081814000
Rspec: 039-96
P&ID: 40141D (B4)
N-5: S2-1301-1 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2-NF, 1974 Edition, Summer 1974 Addenda; Code Case: None</u> | |
| (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1/4"-20 Heavy Hex Nuts (2)	Nova Machine Products	Ht.# 8868448	N/A	RSO-1679-95, SA194 Gr.2H (SEE 92-0067),(CR-2001-93	N/A	Replacement	No

7. Description of Work:

The first tubing clamp support located upstream of 2PIT8239 and the third clamp support upstream of 2PT8300 have been noted as having a one nut configuration instead of the required double nut configuration. MO 96081814 replaced the missing nuts.

8. Tests Conducted: N/A Pressure: N/A Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : CR-2001-93 reconciles the replacement nuts which were certified to ASME III, Class 2, 1989 Ed., No Add. SEE No. 92-0067 allows for the replacement of A563 Gr. A with SA194 Gr. 2H.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 04/05/96 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96090154003
FCN: F12815M
Rspec: 071-96, ASME XI DATA 0581
P&ID: 40123A (G2)
N-5: S2-1208-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/
Expiration Date: N/A

4. Identification of System: Chemical and Volume Control

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" 1500# Angle/Drag Valve	Control Components	352081-1-2	N/A	2LV0110B		---	Yes
Spindle (Plug)	Control Components	35208-1-1, Ht.#9-15017	N/A	RSO-1202-96, SB-637 NO-7718, CR-1001-96	1996	Replacement	Yes

7. Description of Work:

The valve spindle was re-designed to use Inconel 718 instead of type 316 stainless steel in order to reduce erosion, and was replaced in accordance with the new design as shown in drawing SO23-950-186. Reference: FCN F12815M

8. Tests Conducted: System Functional Pressure Test
See: AR 960600865-13

Pres: NOP

Temp: N/A

FORM NIS-2 (back)

9. Remarks : CR-1001-96 reconciles the replacement spindle (plug) which was certified to ASME III, Class 2, 1989 Edition, No Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/10/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/22/96 to 06/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Bechtel Construction Company
P. O. Box 450
San Clemente, CA 92674-0128</p> | <p>Unit: 2
MO: 96100613000 96090379000
DCP: 2-2075.00-0
Rspec: 086-96 R1, 087-96
P&ID: 40111A (D6)
N-5: S2-1201-3-11</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|--|--|

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, Summer 1974 Addenda, Code Case: N-416-1

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda(Replacement); 1992 Edition, No Addenda(NDE and VT-2)

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" Sch 160 SS Pipe	Sumitomo	Ht# C189018	N/A	RSO-0742-93, SA376 TP316 Items 31, 66	N/A	Replacement	No
3/4" Sch 160 SS Pipe	Sanyo Special Steel	Ht# 800426 (Cut Code QPX)	N/A	RSO-1320-96, SA376 TP316 Items 32,33,34	N/A	Replacement	No
2" x 2" x 3/4" SS Reducing Tee	WFI, Inc.	Ht# 1AH	N/A	RSO-1320-96, SA403 WP316 Item 36	1996	Replacement	No
3/4" Sch 160 SS Elbow	Gulfalloy, Inc.	Ht# D-9574	N/A	RSO-2156-84, SA403 WP316 Item 37	N/A	Replacement	No
3/4" SS Globe Valve	Edwards Valves	22AFS	N/A	RSO-1735-93 Item 38	N/A	Replacement	No
3/4" SS Globe Valve	Edwards Valves	20AFS	N/A	RSO-1735-93 Item 39	N/A	Replacement	No
2" SS NPS Special Plug	Con Sol Power Supply	Ht# 811XNA	N/A	RSO-1320-96, SA475 WP316 Item 40	1996	Replacement	No
1 1/2" Sch 160 SS Pipe	Energy and Process Corp.	Ht# K31694	N/A	RSO-1450-96, SA376 TP316 Item 41	N/A	Replacement	No
1/2" CS Plate	Geneva Steel	Ht# 2B8234 (Cut Code QJZ)	N/A	RSO-1474-96, SA36 Item 42	N/A	Replacement	No

7. Description of Work:

DCP 2&3-2075.00SJ required modifying line S2-1218-ML-018 to provide an instrument tap for 2PT1520HP. This required removal of 2" NPS valves S2-1201-MU-001 and MU-029 and replacing them with 3/4" valves of a different make and model. The 2" NPS line was plugged with a special fabricated plug that was installed with butt joint welds. The butt joint welds required liquid dye penetrant examination and radiographic examination for final acceptance. Code Case N-416-1 was invoked to allow waiving the ASME XI hydrostatic pressure test. This required using the 1992 Edition of ASME III and ASME XI for the NDE criteria and the final System Leakage Pressure Test and the VT-2 examination. An integral attachment made of 1-1/2" NPS sch 160 SA-376 grade TP 316 was welded to the 2" NPS pipe and incorporated as part of an ASME III NF pipe support that is used to support the 3/4" NPS branch. The new ASME III butt joints and the weld attaching the 1-1/2" NPS support pipe to the 2" NPS pipe was welded in accordance with ASME III, NB requirements. Reference: Repair Specifications 086-96 and 087-96.

8. Tests Conducted: System Leakage Pressure Test Pres: NOP Temp: N/A
See: AR 961100993-19

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-2002-96 reconciles the replacement items 32,33,34 and 41 which were certified to ASME III , Class 1, 1989 Ed., No Add.; CR-88-008 and SEE 92-0051 , reconciles the replacement items 38 and 39 which were certified to ASME III, Class 1, 1980 Ed., S' 82 Add.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 4/10/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/6/97 to 04/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date April 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
 Unit: 2
 MO: 96101131000 96110458000 96111008000
 96111008001
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
 Rspec: 269-93 R2, ASME XI -0077
 P&ID: 40141A (F7)
 N-5: S2-1305-8
3. Work Performed by: Southern California Edison Company
 Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1971 Edition Summer 1973 Addenda, Code Case: N-1567
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
20" 900# Tilting Disc Check Valve	Anchor/Darling	2N-971	N/A	S21305MU129	1977	---	Yes
Disc	Anchor/Darling	G150, Ht. #F7076	N/A	RSO-3517-85, SA352-LCB	1985	Replacement	Yes

7. Description of Work:

Check valve S21305MU129 was disassembled to perform an IST inspection during the U2C7 outage. The disc was found to have erosion where the web and counterweight connect as documented in NCR 930600096. The disc was replaced per NCR 930600096 and in accordance with MO 96101131 and ASME XI DATA - 0077. To support replacement of the disc, removal and reinstallation of the seal welded hinge pin closure plates, and machining of the hinge pin bores on the new disc was required. MO 96111008 removed and rewelded the seal welds, performed weld build up on the hinge pin closure plates, and NDE examination 2MT-028-97 and 2MT-031-97 were satisfactorily performed in accordance with WR2-93-601 and Repair Specification 269-93. MO 96110458 machined the bushing bores on the new replacement disc, and NDE examination 2MT-029-97 was satisfactorily performed per Repair Specification 269-93.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 930600096-8

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/2/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/16/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96101220000
Rspec: 073-96
P&ID: 40112A (C4)
N-5: S2-1204-21 & 34 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Safety Injection and Shutdown Cooling | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2 (NC), 1971 Edition, Winter 1971 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Safety Injection Pump	Ingersoll Rand	1075154	266	S21204MP019	1977	---	Yes
3/4" x 2 1/2" Socket Head Capscrews (6)	Vitco Nuclear Products	Ht.# 88082	N/A	RSO-1242-89, SA193 Gr.B7	N/A	Replacement	No
3/4" x 2 1/4" Socket Head Capscrew (1)	Vitco Nuclear Products	Ht. Code MK#NE28	N/A	RSO-3575-90, SA193 Gr.B7	N/A	Replacement	No

7. Description of Work:

During performance of MO 96070276 several of the discharge and suction stuffing box extension socket head cap screws (items 179B & 179C) on 2P019 were found to be corroded and required replacement. MO 96101220 was used to perform the material verification of the replacement cap screws per the requirements of Repair Specification 073-96, and MO 96070276 performed the installation of the replacements on to the pump.

8. Tests Conducted: System Functional Pressure Test Pressure: 960 psig Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/22/96 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition Summer 1973 Addenda, Code Cases: N1516-1, N-1567
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 2
 MO: 96101374000 96110459000 96110999000
 96110999001 97010946000
 Rspec: 076-96 R1,011-97, ASME XI DATA-0077
 P&ID: 40141A (C7)
 N-5: S2-1305-7

Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
20" 900# Tilting Disc Check Valve	Anchor/Darling	2N-829	N/A	S21305MU036	1977	---	Yes
Disc	Anchor/Darling	S/N 1, Ht.#37480	N/A	RSO-2-P-999-81, SA352 Gr. LCB	1980	Replacement	Yes
3/4"-10x 3 1/2" Studs (8)	HUB INC.	Ht.# A22324, Trace Code BCB	N/A	RSO-0364-87, SA193 Gr. B7	N/A	Replacement	No
3/4"- 10 Heavy Hex Nuts (8)	Nova Machine Products	Ht.# 5483089, Ht. Code #108	N/A	RSO-0649-96, SA194 Gr. 2H (CR-2001-93)	N/A	Replacement	No

7. Description of Work:

Check valve S21305MU036 was disassembled to replace the disc per NCR 950300014 disposition. Upon disassembly, erosion around the seat ring was found and documented on NCR 970100755. The following maintenance activities were performed; MO 97010946: Removed and replaced seat ring per Repair Specification 011-97 and WR2-97-050. A satisfactory MT examination was performed on the completed sealweld and documented on NDE Report 2MT-017-97. MO 96101374: Replaced valve disc and hinge pin cover bolting materials. MO 96110459: Machined the bushing bores in the new replacement disc and performed a satisfactory MT examination of the newly machined surfaces per Repair Specification 076-96 and documented on NDE Report 2MT-024-97. MO 96110999: Removed and rewelded the hinge pin cover closure plates per WR2-96-270 and Repair Specification 076-96. A satisfactory MT examination was performed on the new closure plate welds and documented on NDE Report # 2MT-025-097 and 2MT-027-97.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 950300014-8

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-2001-93 reconciles the replacement nuts which were certified to ASME III, Class 2, 1989 Edition, No Addenda.

(Applicable Manufacturers Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/7/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/02/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Bechtel Construction Company
P. O. Box 450
San Clemente, CA 92674-0128

Unit: 2
CWO: 96101527000
Rspec: GEN-105 R1
P&ID: 40141A
N-5: S2-1201-3

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class I, 1971 Edition, Summer 1971 Addenda, Code Case: None
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" 8N-2A Manway Stud (2)	ABB Combustion Engineering	Ht.# 40545	N/A	RSO-1691-95, SA540 Gr.B24	N/A	Replacement	No
1 1/2" 8N-2A Manway Stud Nut (2)	ABB Combustion Engineering	Ht.# J6765-1	N/A	RSO-3440-85, SA193 Gr.B7	N/A	Replacement	No

7. Description of Work:

The steam generator manway studs and nuts were removed and examined. All manway studs and nuts were acceptable for reuse with the exception of two studs and two nuts, which were replaced. A VT-1 examination was performed on the replacement studs and nuts with satisfactory results.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 961100993-13

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the A.I.A.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: M. Heiler Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 4/10/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/02/96 to 04/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

C. Thompson
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date April 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
CWO: 96101530000
Rspec: GEN-105 R1
P&ID: 40141A
N-5: S2-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Bechtel Construction Company
P. O. Box 50
San Clemente, CA 92674-0128

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda, Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" 8N-2B Manway Stud Nut (1)	ABB Combustion Engineering	Hit.# J6765-1	N/A	RSO-3440 85, SA193 Gr.17	N/A	Replacement	No

7. Description of Work:

The steam generator manway studs and nuts were removed and examined. All manway studs and nuts were acceptable for reuse with the exception of one nut which was replaced. A VT-1 examination was performed on the replacement nut with satisfactory results.

8. Tests Conducted: System Inservice Pressure Test
See: AR 961100993-12

Pressure: NOP

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 4/10/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the component, described in this Owner's Report during the period 12/02/96 to 04/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date [Signature] April 11/97

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Nuclear Plant Sampling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 1-NF, 1974 Edition Summer 1974 Addenda; Code Case: None</u></p> <p style="margin-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96111540000</p> <p>Rspec: GEN-151</p> <p>P&ID: 40134A (G6)</p> <p>N-5: S2-1212-5</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	14458	N/A	S2-SS-031-H-008	1980	---	No
Load Pin	Pacific Scientific	Heat N2826	N/A	RSO-1592-88, SA564 Gr. 630	N/A	Replacement	No

7. Description of Work:

The snubber load stud was replaced with a load pin for easier access and ALARA considerations. A VT-3 examination of the support assembly was performed after installation.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-3006-95 reconciles the replacement load pin which was certified to ASME III-1-NF, 1974 Edition
Summer 1976 Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules
of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 5/13/97

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, and employed by Arkwright Mutual Insurance Company of
Waltham, Massachusetts have inspected the components described in this Owner's Report during the period
12/19/96 to 05/15/97, and state that to the best of my knowledge and belief, the Owner
has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature

[Signature]

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

May 15, 1997

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturers Data Reports are available on-line)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
 Owner or Owner's Designee, Title

Date: 5/2/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/02/96 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Safety Injection and Shutdown Cooling</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 3, 1974 Edition Summer 1974 Addenda (S21204 Lines); Class 2, 1974 Edition Summer 1974 Addenda (S21219 Line); Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
AR: 961201146
FCN: F12535M
Rspec: N/A
P&ID: 40114D (R13)
N-5: S2-1204-24, S2-1219-4</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Piping	Pullman Inc.	See N5 Data Report	N/A	S21204ML080	1976-1980	---	Yes
Piping	Pullman Inc.	See N5 Data Report	N/A	S21204ML131	1978	---	Yes
Piping	Pullman Inc.	See N5 Data Report	N/A	S21204ML151	1979	---	Yes
Piping	Pullman Inc.	See N5 Data Report	N/A	S21204ML180	1979	---	Yes
Piping	Pullman Inc.	See N5 Data Report	N/A	S21219ML107	1978	---	Yes

7. Description of Work:

LPSI mini-flow piping lines S21204ML080, S21204ML131, S21204ML151, S21204ML180 and S21219ML107 were rerated from 75 to 175 psig per FCN F12535M.

8. Tests Conducted: System Functional Pressure Test Pres: NOP Temp: N/A
See: AR 961201146-1

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/9/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/10/97 to 6/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 10, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96120495000
FCN: F12771M
Rspec: 113-96
P&ID: 40111A (E6)
N-5: S2-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1972 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Thermowell	Rosemont	Line S2-1201-ML-001	N/A	2TE0112-1	N/A	Replaced	No
Inconel Thermowell	ABB Combustion Engineering	5XSN8, Ht. #W495-2	N/A	RSO-1458-96, SB166 Gr. 600	N/A	Replacement	No

7. Description of Work:

The thermowell for RTD temperature element 2TE0112-1 was replaced in conjunction with replacement of the RTD. The replacement thermowell was installed in accordance with Weld Record WR2-96-343 and under the provisions of Repair Specification 113-96. Reference: FCN F12771M

8. Tests Conducted: System Leakage Pressure Test
See: AR 961101116-8

Pres: NOP

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

Supervising ASME Codes Engineer

Date: 6/8/97

Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/16/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Chemical and Volume Control</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda; Code Case: None</u></p> <p style="padding-left: 20px;">(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2</p> <p>MO: 96120339000</p> <p>Rspec: 116-96 R1,</p> <p>P&ID: 40124A (H6)</p> <p>N-5: S2-1208-11</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3" 150# Flow Diverting Valve (BW)	Hammel-Dahl Conoflow	74/5797/018	N/A	2LV0227A	1977	Repaired	Yes

7. Description of Work:

The tack welds on the valve body to seat locks were removed and reinstalled in accordance with weld record WR2-96-346 and Repair Specification 116-96, Revision 1.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/11/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/01/97 to 06/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 11, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120496000
Rspec: 114-96
P&ID: 40111A (G7) |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | N-5: S2-1201-3 |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1971 Edition Summer 1972 Addenda; Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Thermowell	Rosemont	Line S2-1201-ML-009	N/A	2TE0115-2	N/A	Replaced	No
Inconel Thermowell	ABB Combustion Engineering	3XSN4, Ht. #W495-2	N/A	RSO-1458-96, SB166 Gr. 600	N/A	Replacement	No

7. Description of Work:

The thermowell for RTD temperature element 2TE0115-2 was replaced in conjunction with replacement of the RTD. The replacement thermowell was installed in accordance with Weld Record WR2-96-344 and under the provisions of Repair Specification 114-96.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
See: AR 961101101-10

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: Al Merrill Supervising ASME Codes Engineer Date: 6/8/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/17/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Al Thompson Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Sheet 1 of 1

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Unit: 2
MO: 96120497000
FCN: F12771M
Rspec: 115-96
P&ID: 40111A (C7)
N-5: S2-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition Summer 1972 Addenda, Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Thermowell	Rosemont	Line S2-1201-ML-007	N/A	2TE8178-3	N/A	Replaced	No
Inconel Thermowell	ABB Combustion Engineering	5XSN9, Ht. #W495-2	N/A	RSO-1458-96, SB166 Gr. 600	N/A	Replacement	No

7. Description of Work:

The thermowell for RTD temperature element 2TE9178-3 was replaced in conjunction with replacement of the RTD. The replacement thermowell was installed in accordance with Weld Record WR2-96-345 and under the provisions of Repair Specification 115-96. Reference: FCN F12771M

8. Tests Conducted: System Leakage Pressure Test
See: AR 961101101-11

Pres: NOP

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Form(s) are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/8/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/17/96 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120548000
Rspec: GEN-140
P&ID: 40111B
N-5: S2-1201-2 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" Manway Stud (1)	Crosby Valve & Gage	SN. N93878-0033	N/A	RSO-1963-85, SA540 Gr.B24, Class 3	N/A	Replacement	No
1 1/2" Manway Gear Nut (1)	E G & G	Ht. #V,86C-4/52763	N/A	RSO-2554-85, SA194 Gr. 7	N/A	Replacement	No

7. Description of Work:

The bolting on the manway cover of the pressurizer required that (1) stud and (1) nut be replaced. The specific location of the replacement stud and nut was identified by etching the stud hole number onto the replacement items. A VT-1 inspection was performed on the replacement stud and nut.

8. Tests Conducted: N/A Pressure: N/A Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner, or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : CR-3007-94 (stud) and CR-2001-93 (nut) reconciles the replacement stud and nut which were certified to ASME III, Class I, any Year/Addenda from Summer 1971 Addenda through 1989 Edition, No Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 1/20/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/12/96 to 01/21/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions

1B/2

California

National Board, State, Province, and Endorsements

Date

Jan. 21, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120605000
Rspec: GEN-150
P&ID: 40141D
N-5: S3-1301-1 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2-NF, 1974 Edition, Summer 1974 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	37423	N/A	S2-ST-610-H-002	1986	Replaced	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38711	N/A	RSO-1081-92, P/N1801104-05	1992	Replacement	No

7. Description of Work:

The mechanical snubber was replaced as a preventative maintenance action. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/18/96 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120743000
Rspec: GEN-150
P&ID: 40111C (G2)
N-5: S2-1212-9 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Nuclear Plant Sampling | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2-NF, 1974 Edition Summer 1974 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Section
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38644	N/A	S2-SS-072-H-00Y	1991	Replaced	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38700	N/A	RSO-1081-92, P/N1801104-05	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced as a preventative maintenance action. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initiated and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to ASME III-1-NF as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol: Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/22/96 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120819000
Rspec: GEN-156
P&ID: 40111A
N-5: S2-1201-3 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1971 Edition Summer 1971 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	ABB/CE	71270-1	22218	S21301ME089P	1976	Repaired	Yes
3/4" Tube Plug, hot leg, Row 16/Col. 164	Framatome Int'l	Ht.# EA64-3, S/N-0018,(16-164)	N/A	RSO-0156-97, SB-166 Gr.6690	N/A	Replacement	No
3/4" Tube Plug, hot leg, Row 61/Col. 111	Framatome Int'l	Ht.# EA64-3, S/N-0019,(61-111)	N/A	RSO-0156-97, SB-166 Gr.6690	N/A	Replacement	No
3/4" Tube Plug, hot leg, Row 94/Col. 32	Framatome Int'l	Ht.# EA64-3, S/N-0020, (94-32)	N/A	RSO-0156-97, SB-166 Gr.6690	N/A	Replacement	No
.030" Weld Filler Wire	Inco Alloys Int'l	Ht.# NX8995D	N/A	RSO-0156-97, SFA-5.14, ERNiCr-3	N/A	---	No

7. Description of Work:

Framatome, a qualified contractor, performed tubepugging in the steam generator channelheads under the Site ASME Section XI Program and ASME Section XI, IWB-4230, 1989 Edition, No Addenda. The work group responsible for coordinating and overseeing this work was Site Technical Services, Steam Generator Group. A visual examination (VT-1) of the steam generator tube plug welds was performed satisfactorily.

8. Tests Conducted: N/A Pressure: N/A Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owners designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: Al Meidl Supervising ASME Codes Engineer
 Owner or Owner's Designee, Title

Date: 6/8/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/15/97 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature C. Thompson Commissions 1862 California
 National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/07/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96120875000
Rspec: GEN-107
P&ID: 40111A (E5)
N-5: N/A |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: CEDM Control | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1971 Edition, Winter 1973 Addenda; Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
CEDM Vent Ball Seal	ABB Combustion Engineering	1370-133	N/A	S21104CEDM #69	1978	---	Yes
Housing Nut	ABB Combustion Engineering	S/N 408, Ft. #36101	N/A	RSO-1974-92, SA479 Tp.316	N/A	Replacement	No

7. Description of Work:

Replaced the housing nut on the Vent Ball Seal of Control Element Drive Mechanism #69 with an in-kind replacement.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
 See: AR 961200914-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/23/96 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96121415001
Rspec: 002-97
P&ID: 40111B (F)
N-5: S2-120 ¹ -3 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1974 Edition, Summer 1974 Addenda, Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	26697	N/A	S2-RC-012-H-057	1983	---	No
4" Pipe Clamp w/ Load & Clamp Studs	Pacific Scientific	PS-35412	N/A	RSO-4068-84, 1802003-040	N/A	Replacement	No

7. Description of Work:

The pipe clamp at Hanger position S2RC012H057 was replaced with in-kind parts. A VT-3 examination of Clamp-to-Pipe mechanical connections was performed after installation.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/24/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96121541000
Rspec: GEN-150
P&ID: 40141A (F7)
N-5: S2-1305-8 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |

5. (a) Applicable Construction Code: ASME Section III, Class 2-NF, 1974 Edition Summer 1974 Addenda; Code Case: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	268	N/A	S2-FW-180-H-013A	1976	Replaced	No
Mechanical Snubber PSA 10-6	Pacific Scientific	17960, P/N1801103-07	N/A	RSO-1352-91	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced as a preventative maintenance action. The snubber assembly was visually examined (VI-3) after installation with satisfactory results. Reference: NCR 961200658-00. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designer and the AIA.

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/29/96 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 96121843000
Rspec: 123-96
P&ID: 40111A
N-5: S2-1201-3 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Sub-Section NF for Class 1 components, 1974 Edition Summer 1975 Addenda</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Hydraulic Snubber for RCP P002	Paul Munroe Hydraulics	PD16154-257	N/A	S2RCP02H001	1978	Repaired	No

7. Description of Work:

During installation of the new motor for RCP S21201MP002, an interference was noted at the snubber -to-motor housing connection. The rod pivot was found to have two lugs that prevented installation. The lugs were removed by grinding per Repair Specification 123-96 and in accordance with NCR 961201726 disposition step 1.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturers Data Reports are available on-line)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/28/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/02/97 to 01/29/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 29, 1997

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
Owner or Owner's Designee, Title

Date: 5/13/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/27/97 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisors of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 97010253000
Rspec: GEN-150
P&ID: 40130 (B6)
N-5: S2-1201-15 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2-NF, 1974 Edition Summer 1974 Addenda; Code Cases: None</u> | |
| (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	4590	N/A	S2-RC-157-H-00L	1978	Replaced	Yes
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38694	N/A	RSO-1081-92, P/N1801104-05	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced with an in-kind replacement snubber. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/04/97 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
National Board, State, Province, and Endorsements

Date May 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 97010319000
Rspec: GEN-150
P&ID: 40141A (F3)
N-5: S2-1301-1 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Main Steam | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2-NF, 1974 Edition Summer 1974 Addenda; Code Case: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	*N/A	N/A	S2-ST-015-H-017	N/A	Replaced	No
Mechanical Snubber PSA 10-6	Pacific Scientific	17991, P/N1801103-07	N/A	RSO-0806-92	N/A	Replacement	No

7. Description of Work:

The mechanical snubber was replaced as a preventative maintenance action. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. The removed snubber was placed into the snubber rebuild program. Reference: NCR 961201218. *Removed snubber manufacturers tag found missing upon visual inspection in accordance with MO 96070543.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

(Applicable Manufacturers Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: Al Miller Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 04/08/97 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

CP Thompson Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 15, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/15/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/17/97 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 97010759000
Rspec: 008-97
P&ID: 40114D (B4)
N-5: S2-1204-34 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Safety Injection and Shutdown Cooling | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1974 Edition, Summer 1975 Addenda, Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
4" 900# Gate Valve	WKM	507387	1529	2HV9307	1979	Repaired	Yes

7. Description of Work:

To support installation of a new tapered stem pin the pin hole in the threaded gate neck had to be machined to the new size pin. Per NCR 970100523 the hole in the gate neck was reamed such that there is a "0.000 - 0.001" interference fit on the minor diameter of the taper pin and a "0.001" - 0.003" interference fit on the major diameter of the taper pin.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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 and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/10/97 to 05/15/97 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 1-NF, 1974 Edition Summer 1974 Addenda, Code Cases: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 2
 MO: 97011349000
 Rspec: GEN-152 R2
 P&ID: 40113 (D5)
 N-5: S2-1204-5
 Type Code Symbol Stamp: N/A
 Authorization No: N/A
 Expiration Date: N/A

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
25" Rigid Strut	Lisega	S2-SI-063-H-018	N/A	3922RR1	N/A	---	No
3/8" Load Pin (2)	Pacific Scientific	Heat # N3199A	N/A	RSO-1212-93, SA564 Gr.630	N/A	Replacement	No

7. Description of Work:

Replaced both load pins on rigid strut S2-SI-063-H-018 with in-kind replacements. The rigid strut assembly was visually examined (VT-3) after installation with satisfactory results.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the ALA.

FORM NIS-2 (back)

9. Remarks : CR-3006-95 reconciles the replacement load pins which were certified to ASME III-1-NF, 1980 Edition Summer 1982 Addenda.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/13/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 01/22/97 to 05/15/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date MAY 15, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|---|--|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Reactor Coolant</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 1, 1980 Edition Summer 1982 Addenda (Seal Cartridge); ASME III, Class 1, 1971 Edition Winter 1971 Addenda (Pump); Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 2
MO: 97021178000
Rspec: GEN-106 R2
P&ID: 40111A
N-5: S2-1201-3</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|---|--|

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0558	N/A	S21201MP001	1977	---	Yes
RCP Pump Mechanical Seal	Bingham-Willamette	1714880-8	1168	SO23-CART-#18, RSO-2779-86, Rebuild MO 97021461	1986	Replaced	Yes
RCP Pump Mechanical Seal	Bingham-Willamette	1659057-2	1173	SO23-CART-#23, RSO-2779-86	1986	Replacement	Yes

7. Description of Work:

The RCP seal cartridge was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program. The removed seal cartridge was placed into the rebuild program.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: N/A
See: AR 961100993-3

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 02/21/97 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector: [Signature] Signature Commissions 1862 California
National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|--|
| 1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770 | Unit: 2
MO: 97021481000
Rspec: GEN-156
P&ID: 40111A
N-5: S2-1201-3 |
| 2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128 | |
| 3. Work Performed by: Southern California Edison Company | Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A |
| 4. Identification of System: Reactor Coolant | |
| 5. (a) Applicable Construction Code: <u>ASME Section III, Class I, 1971 Edition, Summer 1971 Addenda; Code Cases: None</u>
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u> | |

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	ABB/CE	71270-1	22218	S21301ME089P	1976	Repaired	Yes
3/4" Shallow Bore Remote Welded Plug(2)	Framatome Int'l.	EA64-3-0021, EA64-3-0022	N/A	RSO-0156-97, SB166 Gr.690	N/A	Replacement	No
.030" Dia. Weld Filler Material	INCO Alloys Int'l.	Ht.#NX8995D	N/A	RSO-0156-97, SFA-5.14	N/A	Replacement	No

7. Description of Work:

Site Technical Services Group contracted Framatome International to remove and replaced two weld plugs in the steam generator channelheads due to leakage. A VT-1 examination of the welded tube plugs was performed satisfactorily.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer
 Owner or Owner's Designee, Title

Date: 5/12/97

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 02/22/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

Inspector's Signature [Signature] Commissions 1862 California
 National Board, State, Province, and Endorsing States

Date May 13, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/13/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/01/97 to 05/14/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1812 California
Inspector's Signature National Board, State, Province, and Endorsements

Date May 14, 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
 2244 Walnut Grove Avenue
 Rosemead, California 91770
 Unit: 2
 MO: 97030186001, WSI Travelers
 Rspec: 027-97
 P&ID: N/A
 N-5: N/A
2. Plant: San Onofre Nuclear Generating Station
 San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
 (under owners Section XI Program)
 and: Welding Services Inc. (under their
 National Board "NR" Program)
 Type Code Symbol Stamp: NR
 Authorization No: 69
 Expiration Date: 11/98
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Ed; S' 74 Add (Thermowell); Class 1, 1971 Ed; S' 71 Add (Vessel); Code Case: None
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda; 1992 Edition, No Addenda (VT-2); Code Case: N-416-1

6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer	ABB Combustion Engineering	CE70602	21495	S21201ME087	1971	---	Yes
Thermowells (fabricated) 2ea.	Consolidated Power Supply	Ht.# 9E4838	N/A	RSO-0405-97, SA479 Tp.316 (CR-2000-96)	N/A	Replacement	No
Vessel Nozzle (instrument 2TE0101)	Welding Services Inc.	7350811 RA 1-02	N/A	RSO-0290-94, SA479 Tp.316L & SB166-N06690	1993	Replacement	Yes

7. Description of Work:

Instrument Nozzle for 2TE0101, in Pressurizer Vessel (S21201ME087) was replaced by contractor (WSI) under their National Board "NR" Program referenced above. Replacement was documented on (attached) NR-1 Data Report. Replacement nozzle was supplied by SCE. Documentation for this replacement was transmitted to CDM with CWO 97030334 on transmittal #97137. M.O. 97030186001, Repair Specification 027-97, Revision 1 fabricated two replacement thermowells. One was installed in plant position 2TE0101 of the pressurizer vessel. The other was placed in stock for future use. The two thermowells were fabricated from SA479-316L bar stock in accordance with drawing SO23-924-524. The completed thermowells were hydro tested and PT examined. Note: The 1" NPS and less exemption of IWA-7400 was taken for replacement of the thermowell (See Weld Record WR2-97-142 for installation).

8. Tests Conducted: System Hydrostatic Pressure Test Pres: 4500 psig Temp: N/A
 ** System Leakage Pressure Test NOP N/A
See: AR 970300092-11

**** This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.**

NOTE: Supplemental sheets in the 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 report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks : CR-2000-96 reconciles the replacement thermowell material which was certified to ASME III, Subsection NB, Class 1, 1989 Edition No Addenda. WSI Traveler 37021 transmitted to CDM along with MO 97030334 under transmittal number 97137.

(Applicable Manufacturer's Data Reports are available on-line)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/11/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/06/97 to 06/11/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 11, 1997

FORM NR-1 REPORT OF REPAIR MODIFICATION OR INSTALLATION OF REPLACEMENT(S)
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Welding Services Inc. 37021
(name) (repair organization's P. O. no., job. no., etc.)
2225 Skyland Court, Norcross, Georgia 30071
(address)
2. Owner Southern California Edison
(name)
2244 Walnut Grove Avenue, Rosemead, California 91770
(address)
3. Name, address and identification of nuclear power plant San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
4. System Unit 2 Pressurizer
5. a: Component repaired, modified or replaced Repair and Replacement
 b: Name of manufacturer Combustion Engineering
 c: Identifying nos. CE70602 21495 S21201ME087 1971
(mfr.'s serial no.) (Nat'l. Bd. No.) (jurisdictional no.) (other) (year built)
 d: Construction Code 1971 Summer 1971 N/A N/A
(edition) (addenda) (Code Case(s)) (Code Class)
6. Section XI * 1989 No Addenda N/A
(edition) (addenda) (Code Case(s))
7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1992 No N/A
(edition) (addenda) (Code Case(s))
8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: III 1971 S 1971 N/A
(Code) (edition) (addenda) (Code Case(s))
9. Design responsibilities Southern California Edison
10. Tests conducted: hydrostatic pneumatic design pressure pressure * psi
11. Description of work Replacement of vessel temperature nozzle (2TE0101). Included
(use of additional sheet(s) or sketch(es) is acceptable if properly identified)
temperbead repair per 1992 Section XI, IWA-4500. Replacement nozzle was
provided by SCE.
12. Remarks:
 * System leak test performed by owner
 * Owner's Sec. XI program Code of Record is 1989 edition, no addenda; Weld repair was performed per IWA-4500, 1992 ed, no add (Owner had relief request to use for temperbead repair)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the items described above conforms to Section XI of the ASME Code and the National Board rules as defined in the publication NB-102, current edition.
 Certificate of Authorization no. 69 to use the "NR" stamp expires November 7, 1998.

Date March 18, 1997 Signed Welding Services Inc. [Signature] QA Mgr.
(repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Arkwright Mutual Insurance Co. of Mass have inspected the repair, modification or replacement describe in this report on March 18, 1997 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publication NB-102, current edition. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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 a loss of any kind arising from or connected with this inspection.

Date 3/18/97, 1997 Signed [Signature] Commissions NB7938 B.P., I.S., IS/CA1300
(Authorized Inspector) (Nat'l. Bd. No. (including endorsements) state or province and number)

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/7/97
Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/23/97 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturers Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/7/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/23/97 to 06/09/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date June 9, 1997

FORM NIS-2 (back)

9. Remarks : None.

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/24/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Jurisdictions

Date May 13, 1997

FORM NIS-2 (back)

9. Remarks : None

(Applicable Manufacturer's Data Reports are available on-site)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 repair or replacement

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/12/97
 Owner or Owner's Designee, Title

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, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 03/24/97 to 05/13/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's 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 Owner's 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.

[Signature] Commissions 1862 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date May 13, 1997