

**INSERVICE INSPECTION SUMMARY** 

REPORT

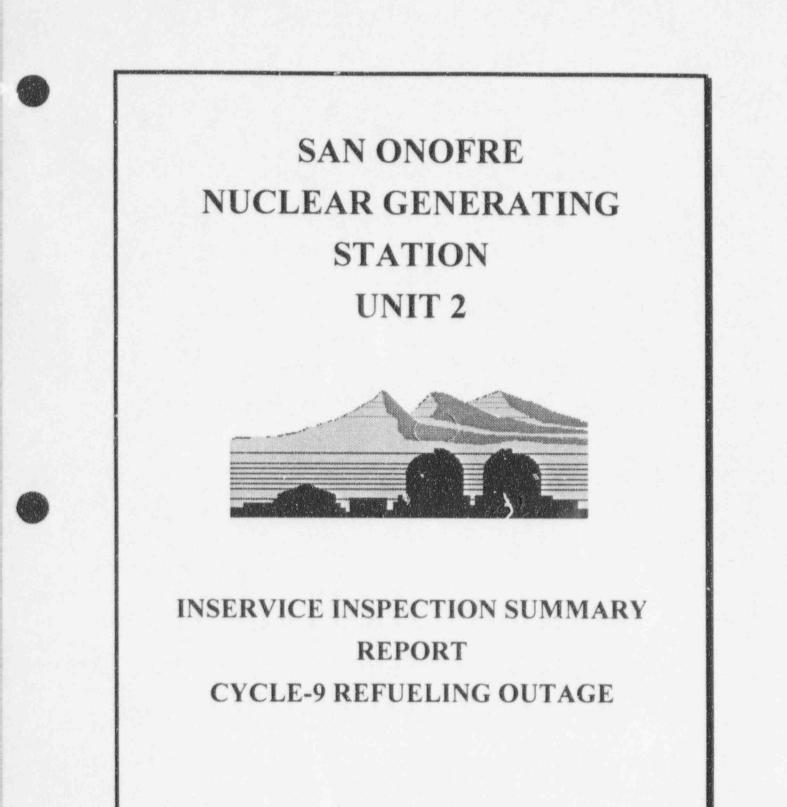
2nd Interval, 1st Period

Cycle 9 Refueling outage

**U2C9** 

Site Technical Services ISI Group

9706270329 970620 PDR ADOCK 05000361 G PDR



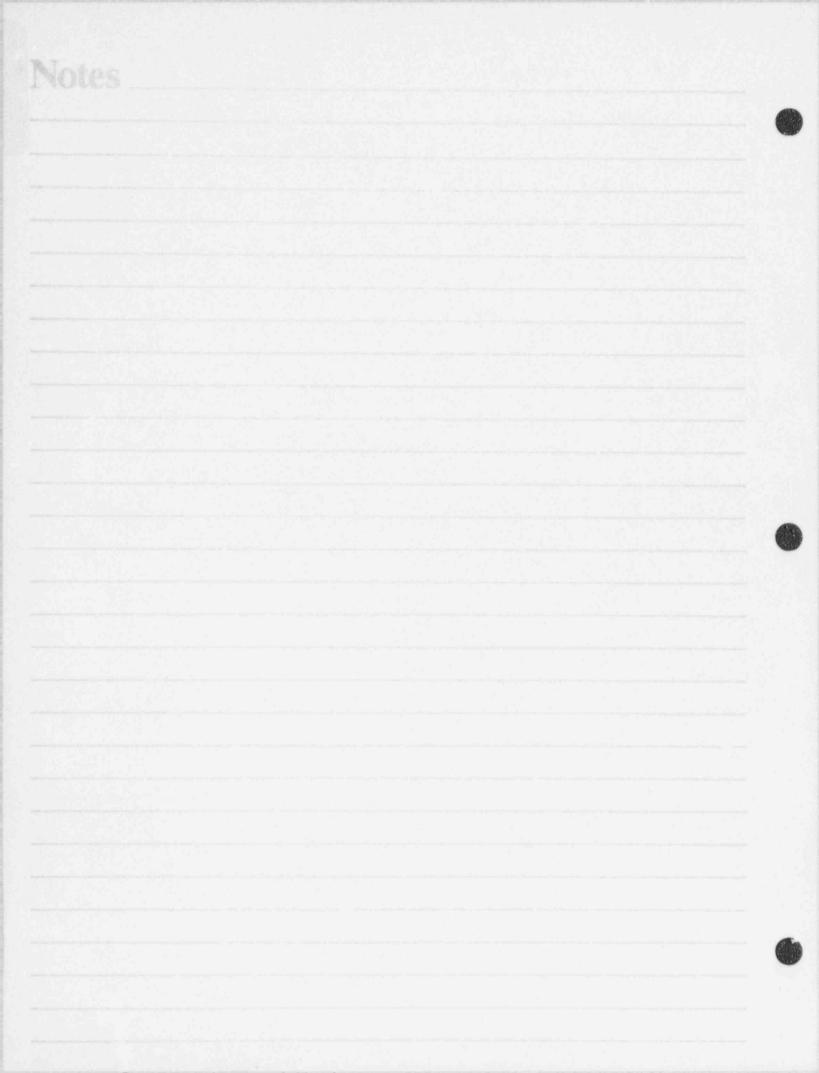
JUNE 19, 1997

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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 Augu	st 17,	1993	
2nd Interval	August	18,	1993	through Augu	st 17,	2003	
3rd Interval	August	18,	2003	through Augu	st 17,	2013	
4th Interval	August	18,	2013	through Augu	st 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 IntervalAugust 18, 1983 through March 31, 19942nd IntervalApril 1, 1994 through August 17, 2003

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

PERIODS	DATES	OUTAGES		
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 REQUIRI	PERIOD ED	PERIOD	PERIOD
			1	2	3
1	B-A	27	3	2	23
	B-B	8	3	2 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	ĩ
	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 Re	fueling Outage		
	B-Q	Per Tech			
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		spection Period		
	D 1 / C 1 1	-			

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

CLAS	I	TOTAL EXAMS REQUIRE	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

### **<u>3 SUMMARY REPORT</u>**

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

Name & Address of Owners:

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

City of Anaheim Public Utilities Department City Hall West - 11th Floor 201 S. Anaheim Blvd. Anaheim, CA 92805 San Diego Gas & Electric Co. 101 Ash St. San Diego, CA 92112

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

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	FORM			FOR INSERVICE INSPECTIONS ons of the ASME Code Rules
1.	Owner:	Southern California Edi 2244 Walnut Grove Av		
2.	Plant:	San Onofre Nuclear Ge 14000 Basilone Road, San Clemente, CA 926	4 Mile	es South of San Clemerte
3.	Plant Unit	2	4.	Owner's Certificate of Authorization: <u>N/A</u>
5.	Commercia	Service Date: 8/18/83	6.	National Board Number for Unit: <u>N/A</u>
7.	Component	s Inspected:		

Manufacturer Component Manufacturer State or National or or Installer Province or Board Installer Appurtenance Serial Number Number Number Steam Gen Combustion 2ME089 71270-1 Engineering 35203-82 22218 Pressurizer Combustion 2ME087 Engineering 70602 35203-82 21495 Reactor Coolant Pump 2MP001 Byron Jackson 701-N-0558 N/A N/A Reactor Coolant Pump 2MP002 Byron Jackson 701-N-0559 N/A N/A Reactor Coolant Pump 2MP003 Byron Jackson 701-N-0560 N/A N/A Reactor Coolant Pump 2MP004 Byron Jackson 701-N-0557 N/A N/A Shutdown Cooling Engineers & Heat Exchanger Fabricators, Inc. S-16644A N/A 1353 **ME003 Regenerative Heat** Combustion Exchanger ME063 Engineering 78826 N/A 10782





#### 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
12.	Date/Revision of Inspection Plan November 8, 1995 Doc # 90063, Rev 2
13.	Abstract of Examination & TestSee page 9
14.	Abstract of Results of Examinations & Tests:See page 10
15.	At tract of Corrective Measures:See page 11
Cert	n conform to the rules of the ASME Code, Section XI. ificate of Authorization No. <u>N/A</u> Expiration Date: <u>N/A</u> <u>b b/20</u> 19 <u>97</u> Signed Southern California Edison By <u>MAGA</u> (Owner) Manager, Site Technical Services
Vess	<b>CERTIFICATE OF INSERVICE INSPECTION</b> e undersigned, holding a valid commission issued by the National Board of Boiler and Pressure el Inspectors and the <u>State of California</u> and employed by <u>Arkwright Mutual Insurance Company</u> 'altham, Massachusetts have inspected the components described in this Owner's Report during the

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.

Inspector's Signature Commissions <u>CA 1262</u>, <u>NB 8024</u> <u>I,B.C.S.N.</u> IS. NB, State, Province or Endorsements Date June 20, 1997

#### 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.

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# **4 ABSTRACT OF NIS-2 REPAIRS & REPLACEMENTS**

#### Unit 2 Cycle 9 Abstract of Records of Repairs and Replacements

	MO	EQID	Class	NIS-2	Worksum
1	93091435001	S21204MR435	111-2	11/21/95	Replaced valve & fittings
2	94082138001	\$2\$1038H039A	111-2	7/17/96	Snubber deletions
3	94082140001	S2SI038H015A	111-2	6/19/96	Replaced snubbers w/ rigid struts
4	94082254000	\$2\$I038H115	111-2	6/19/96	Installed new rigid strut
5	95040232000	S21201MP004	111-1	6/11/97	Replaced mechanical seal cartridge
6	95060405000	S21204MR416	111-2	6/19/96	Installed a tube union
7	95060652000	S21208MW219	111-2	6/14/96	Replaced valve stem
8	95060821000	S21208MW220	111-2	6/14/96	Replaced valve stem
9	95060988001	S21208MW246	111-2	6/14/96	Replaced valve stern
10	95081966000	027-06026 (PSV)	HI-2	12/8/95	Replaced valve spindle, spring & washers
11	95090458000	2HV4053	111-2	6/9/97	Replaced valve plugs
12	95091026000	2HV4054	111-2	6/9/97	Replaced valve plugs
13	95091684000	S21208MW218	111-2	1/10/96	Replaced valve stem
14	95100597000	2HV8421	111-2	6/9/97	Replaced valve plug
15	951 30593001	2PV0201A	111-2	7/17/96	Replace valve spindle
16	95111191000	2PV0201B	111-2	8/23/96	Replaced valve spindle
17	95111628000	2FT0212	111-2	6/14/96	Replaced 3-valve manifold
18	95120527000	S21208MR221	111-2	8/23/96	Replaced valve disc
19	96030073000	2PSV0200	111-1	6/9/97	Replaced valve & flange bolting
20	96030120000	2PSV0201	11)-1	6/9/97	Replaced valve & flange bolting
21	96030150000	2PSV8403	111-2	6/9/97	Replaced relief valve
22	96030193001	2PSV8409	111-2	5/14/97	Replaced main steam safety valve
23	96030199000	2PSV8410	111-2	1/21/97	Replaced main steam safety valve & inlet nuts
24	96030210000	2PSV8412	111-2	1/21/97	Ruplaced main steam safety valve & inlet nuts
25	96030229000	2PSV8417	111-2	1/21/97	Replaced main steam safety valve & inlet nuts
26	96030233000	.?PSV8418	111-2	1/21/97	Replaced main steam safety valve & inlet nuts
27	96030964000	S':1204MU024	Ilí-2	6/9/97	Replaced valve disc
28	96031222000	2PV0100A	111-1	6/12/97	Replaced upper bonnet beliows assembly
29	96031224000	2PV0100B	111-1	6/12/97	Replaced upper bonnet bellows assembly
30	96031765000	2F3V9349	111-2	5/14/97	Replaced valve
31	96031968000	S2SI038H015A	111-2	6/19/96	Replaced snubbers w/rigid struts
32	96032350000	S21201MP002	+1	5/14/97	Replaced mechanical seal cartridge
33		S21208MW248	111-2	6/17/96	Replaced bladder assembly
34	96033361000	S2RC018H001N	111-1	1/10/97	Removed snubbers
35	96033362000	S2RC147H001B	111-1	1/10/97	Removed snubbers
36	96033363000	S2SI165H006	111-1	1/21/97	Removed snubbers
37	96033368000	S2SI043H020	111-1	1/21/97	Removed snubbers
38	96033369000	S2SI152H001	111-1	1/21/97	Removed snubber
39	96033371000	S2SI043H016	111-1	1/10/97	Replaced snubber w/ rigid strut
40	96033372000	S2SI043H018A	111-1	1/21/97	Replaced snubbers w/ rigid struts
41	96033373000	S2S1059H009	111-1	1/10/97	Replaced snubber w/ rigid strut
42	96033440000	S21204MU016	111-2	6/9/97	Replaced valve disc
43	96033461000	S2SI044H001	10-1	1/21/97	Removed snubbers
44	96033475000	S2SI044H008	411-1	1/10/97	Removed spring hanger
45	96033494000	S2SI044H003	111-1	1/10/97	Replaced snubbers w/ rigid struts
46	96033531000	S2G1045H005	111-1	1/21/97	Removed snubbers
47	96033827000	S21204MU012	111-2	6/9/97	Replaced valve disc
48	96033981000	S21301ME088	111-2	4/11/97	Replaced manway cover bolting
49	96040025000	S21201MP001	111-1	6/11/97	Replaced mechanical seal cartridge
50	96040311000	S2SI045H008	111-1	1/10/97	Replaced snubber w/ rigid strut

Monday, June 15, 1997

Unit 2 Cycle 9 Abstract of Records of Repairs and Replacements



	MO	EQID	Class	NIS-2	Worksum
1	96040329000	S2SI046H002	111-1	1/21/97	Removed snubbers
2	96040351000	S2SI062H002	III-1	1/21/97	Removed shubbers
3	96040352000	S2SI155H001	111-1	1/21/97	Removed snubber
4	96040354000	S2SI046H006	111-1	1/21/97	Replaced snubber w/ rigid strut
5	96040356000	S2SI046H010	111-1	1/21/97	Replace snubber w/ rigid strut
6	96040912000	S21201MP003	111-1	5/15/97	Replaced mechanical seal cartridge
7	96040943000	\$2\$1062H001	111-1	1/10/97	Replaced snubber w/ rigid strut
8	96040946000	\$2\$1063H022	111-1	1/10/97	Removed snubber
9	96040947000	S2S1067H002	111-2	1/10/97	Removed snubber
0	96040948000	S2SI063H018	111-1	1/10/97	Replaced snubber w/ rigid strut
1	96040949000	S2S1063H020	Ili-1	1/10/97	Replaced snubbers w/ rigid strut
2	96040950000	S2S1064H020	111-1	1/21/97	Removed snubber
3	96040951000	S2S1064H007	111-1	1/21/97	Replaced snubbers w/ rigid struts
4	96040953000	S2SI065H005	111-1	1/21/97	Removed snubbers
5	96040957000	\$2\$1074H002	111-1	1/10/97	Removed snubber
6	96040958000	S231066H010	111-1	1/10/97	Replaced snubbers w/ rigid strut
7	96040959000	S2SI087H019	111-2	1/21/97	Removed snubber
8	96040960000	S2S1087H007	111-2	1/10/97	Replaced snubbers w/ rigid struts
9	96040963000	S2SI168H001	111-1	1/21/97	Removed snubber
0	96040965000	S2SI168H002	HI-1	1/21/97	Replaced snubbers w/ rigid struts
1	96041150000	S21204MU025	111-2	6/9/97	Replaced disc, bonnet bolting and added tack welds
2	96062131000	S21208MU067	01-2	4/1/97	Replaced check valve
3	96081814000	2PT8239	111-2	5/13/97	Replaced tubing clamp nuts
4	96090154003	2LV0110B	111-2	6/10/97	Replaced disc stack
5	96090379000	S2-1201-ML-018	111-1	4/11/97	Replaced pipe support
6	96100613000	\$21201MU029	ili-1	4/11/97	Replaced modified pipe support
7	96101131000	S21305MU129	111-2	6/9/97	Replaced valve disc
8	96101220000	S21204MP019	111-2	5/14/97	Replaced stuffing box bolting
9	96101374000	\$21305MU036	HI-2	6/9/97	Replace valve disc and hinge pin cover bolting
0	96101527000	S21301ME089	111-2	4/11/97	Replaced manway bolting
1	96101530000	S21301ME088	111-2	4/11/97	Replaced manway cover nut
2	96110458000	S21305MU129	111-2	6/9/97	Repaired disc bushing bores
3	96110459000	\$21305MU036	111-2	6/9/97	Repaired disc bushing bores
4	96110999001	S21305MU036	111-2	6/9/97	Rewelded hinge pin cover plates
5	96111008001	S21305MU129	111-2	6/9/97	Repaired hinge pin closure plates
6	96111540000	S2SS031H008	111-2	5/15/97	Replaced load stud w/load pin
7	96111591000	\$22423MU055	111-2	5/13/97	Replaced valve bonnet
8	961201146	\$21204ML000	111-2	6/10/97	Rerated LPSI piping lines from 75 to 175 psig
9	96120339000	2LV0227A	111-2	6/11/97	Reinstalled tack welds on valve body to seat locks
0	96120495000	2TE0112-1	111-1	6/9/97	Replaced thermowell
1	96120496000	2TE0115-2	111-1	6/9/97	Replaced thermowell
2	96120497000	2TE9178-3	10-1	6/9/97	Replaced thermowell
3	96120548000	S21201ME087	111-1	1/21/97	Replaced manway cover bolting
4	96120605000	\$25T610H002	111-2	5/14/97	Replaced snubber
5	96120743000	S2SS072H00Y	111-2	5/15/97	Replaced snubber
6	96120819000	S21301ME089P	HI-1	6/9/97	Installed tube plugs
7	96120863000	\$21104CEDM	111-1	5/13/97	Replaced vent stem
8	96120875000	S21104CEDM	111-1	3/97	Replaced housing nut
9	96121415001	S2RC012H057	111-1	5.13/97	Replaced pipe clamp
0	96121541000	S2FW189H013A	10-2	5/15/97	Replaced snubber
1	96121843000	S2RCP02H001	111-1	1/29/97	Removed snubber tow rod pivot lugs

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# Unit 2 Cycle 9 Abstract of Records of Repairs and Replacements

	Start House
102	961
103	961
104	961
105	961
106	970
107	970
	-

	MO	EQID	Class	NIS-2	Worksum
02	96121941000	S21204MU024	111-2	6/9/97	Replaced disc
03	96121943000	S21204MU025	111-2	6/9/97	Reinstalled original disc
04	96121944000	S21204MU025	111-2	6/9/97	Added four new tack welds
05	96121945000	S21204MU024	111-2	6/9/97	Added four new tack welds
06	97010213001	S2SS042H021	111-2	5/14/97	Replaced snubber and pipe clamp
07	97010253000	S2RC157HOOL	111-2	5/15/97	Replaced snubber
08	97010319000	S2ST015H017	111-2	5/15/97	Replaced snubber
09	97010322001	S21208MU003	111-2	5/13/97	Resealwelded body to bonnet
10	97010759000	2HV9307	111-2	5/15/97	Repaired threaded gate neck stem pin hole
11	97010946000	S21305MU036	111-2	6/9/97	Replaced seat ring & repaired eroded areas
12	97011131000	S21305MU129	111-2	5/14/97	Reseativelded body to seat ring
13	97011349000	S2SI063H018	Ili-1	5/15/97	Replaced strut load pins
14	97021178000	S21201MP001	111-1	5/14/97	Replaced mechanical seal cartridge
15	97021481000	S21301ME089P	III-1	5/13/97	Replaced tube plugs
16	97030013000	S21104CEDM	1/1-1	5/14/97	Repaired housing nut/ball seal housing
17	97030186001	S21201ME087	111-1	6/11/97	Replaced thermowell & nozzle
18	97031346000	S21301ME089P	III-1	6/9/97	Replaced manway cover bolting
19	97031358000	S21301ME089P	111-1	6/9/97	Replaced manway bolting
20	97031365000	S21301ME088P	111-1	5/13/97	Replaced manway stud
21	97031369000	S21301ME088P	111-1	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

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



## 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 Flywheel

# 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.

SUMMARY REPORT 17 OF 17

# **8.0 STEAM GENERATOR EXAMINATIONS**



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.

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)

P. O. Box 128 San Clemente, CA 92674-0128 Unit 2 San Onofre Nuclear Generating Station Special Report - Inservice Inspection of Steam Generator Tubes

bcc:

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REVIEWERS: M. P. Short\*

A. L. Matheny\* J. L. Rainsberry G. T. Gibson C. E. Williams H. S. Smith

\* Concurrence by e-mail



### 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:

- 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:

- 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 "freespan") 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 followup report discussed in the cover letter.



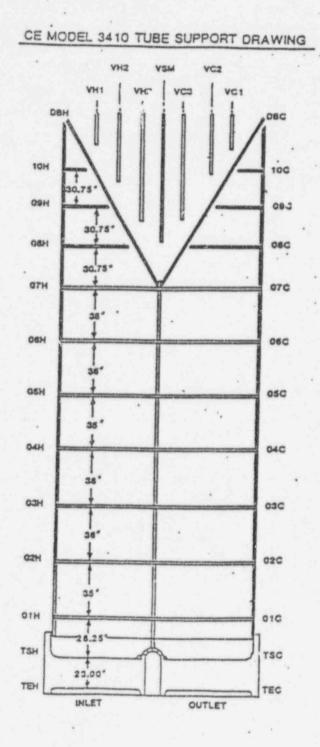


FIGURE 1 -Steam Generator Internal Location Reference Guide

# TABLE 1 - Summary of Planned Inspection Program

the second se		i crocinage or 1 uoco
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%

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







# 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%		





Indication Orientation/Location	Steam G	
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	E-088	E-089
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 3 - Number of Tubes Removed From Service



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

### **STEAM GENERATOR E-088**

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

#### **STEAM GENERATOR E-089**

REGION	<b>TUBE NUMBER</b>		GPM	MAX TEST		
	ROW-COLUMN	LOC.	NOPD	MSLB	POST-MSL	PRESS
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
122 C	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









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

Southern California Edison

ISI ID NO.	Area Description	Cat	Item	Method		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	ACCEP
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	B-B	B2 40	UT	45°	12/16/96	296-09IUT-029	ACCEP
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	B-B	B2.40	UT	60°	12/16/96	296-09IUT-029	ACCEP
02-003-010	INLET NOZZLE-10-HEAD WELD	B-D	B3.130	UT	0°	12/16/96	296-09IUT-029	ACCEP
02-003-010	INLET NOZZLE-TO-HEAD WELD	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEP
02-003-010	INLET NOZZLE-TO-HEAD WELD	B-D	B3.130	UT	60°	12/16/96	296-09IUT-029	ACCEP
02-003-011	OUTLET NOZZLE-1 O-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	0°	12/16/96	296-09IUT-029	ACCEP
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEP
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	B-D	B3.130	UT	60°	12/16/96	296-09IUT-029	ACCEP
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	) UT	0°	12/16/96	296-09IUT-029	ACCEP
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	UT	45°	12/16/96	296-09IUT-029	ACCEP
02-003-012	OUTLET NOZZLE-TO-HEAD WELD @ 315 DEGREES	B-D	B3.130	) UT	60°	12/16/96	296-09IUT-029	ACCEP
02-003-017	INLET NOZZLE INNER RADIUS	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEP
02-003-018	OUTLET NOZZLE INNER RADIUS @ 45 DEGREES	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEP
02-003-019	OUTLET NOZZLE INNER RADIUS @ 315 DEGREES	B-D	B3.140	UT	70°	12/16/96	296-09IUT-028	ACCEP
02-003-027-01	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEF
02-003-027-02	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-027-03	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-027-04	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-027-05	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-027-06	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-027-07	PRIMARY MANWAY STUD @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEF
02-003-028-01	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEF
02-003-028-02	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-028-03	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCER
02-003-028-04	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEF
02-003-028-05	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEF
02-003-028-06	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-028-07	PRIMARY MANWAY NUT @ 0 DEGREES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-029-01	PRIMARY MANWAY STUD @ 112 DEGREES, 30 MINUTES	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP
02-003-029-02	PRIMARY MANWAY STUD @ 112 DEGREES, 30	BG2	B7.30	VT-1	N/A	12/17/96	296-09IVT-021	ACCEP



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

ISI ID NO.	Area Description	Cat	Item	Method		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	VI-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	296-09JVT-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 MINULES	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

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	296-091PT-028	ACCEPT
02-005-035	SUPPORT SKIRT	F-A	F1.40B	VT3	N/A	12/21/96	296-091VT-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	FRIMARY MANWAY BOLTING (NUT)	BG2	B7.20	VT-1	N/A	12/17/96	296-09IVT-020	ACCEPT
ZONE: 0/3								
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
02-00/-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
02-005-001	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	296-091MT-010	ACCEPT
02-006-002 SG	ELBOW LONGITUDINAL WELD (BOTTOM) - S/G END	B-J	B9.12	UT	45°	12/11/96	295-09IUT-014	ACCEPT
02-006-002 SG	ELBOW LONGITUDINAL WELD (BOTTOM) - 8/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		12/11/96	An and the second second second second	
02-006-004	ELBOW-TO-PIPE WELD	B-J	B9.11	MT		12/10/96	296-9IMT-006	
	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT			296-09IUT-014	
				and a second shall be a second				



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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	ACCEP
02-006-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/10/96	296-9IMT-006	ACCEP
02-006-009	DRAIN NOZZLE-TO-PIPE WELD	B-J	B9.32	MT	N/A	12/10/96	296-9IMT-006	ACCEP
02-006-010	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.130	UT	45	12/11/96	296-09IUT-015	ACCEP
02-006-010	SURGE NOZZLE-TO-SAFE END WELD	B-F	B5.130	PT	N/A	12/11/96	296-091PT-008	ACCEP
02-006-011	DRAIN NOZZLE-TO-SAFE END WELD 2"	B-F	B5.140	PT	N/A	12/11/96	296-091PT-008	ACCEP
ZONE: 14								
02-014-001	SAFE END-TO-PUMP SUCTION NOZZLE WELD	B-J	B9.11	UT	43	12/18/96	296-09IUT-033	ACCEP
02-014-001	SAFE END-TO-PUMP SUCTION NOZZLE WELD	B-J	B9.11	PT	N/A	12/18/96	296-091PT-021	ACCEP
02-014-002	SAFE END-TO-ELBOW WELD	B-F	B5.130	UT	43	12/18/96	296-09IUT-033	ACCEP
02-014-002	SAFE END-TO-ELBOW WELD	B-F	B5.130	PT	N/A	12/18/96	296-091PT-021	ACCEP
02-014-003 P	ELBOW LONGITUDINAL WELD (TOP) - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-003 P	ELBOW LONGITUDINAL WELD (TOP) - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-003 SG	ELBOW LONGITUDINAL WELD (TOP) - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-004 P	ELBOW LONGTDL WELD (BOTTOM)-PMP END	B-J	E9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-004 P	ELBOW LONGTDL WELD (BOTTOM)-PMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	
02-014-004 SG	ELBOW LONGITUDINAL WELD (BOTTOM)-S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	
02-014-004 SG	ELBOW LONGITUDINAL WELD (BOTTOM) S/G END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-005	ELBOW-TO-PIPE WELD	B-J	B9.11	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-005	ELBOW-TO-PIPE WELD	B-J	B9.11	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-006 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-006 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-006 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-007 P	PIPE I ONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-007 P	PIPE LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-007 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-007 SG	PIPE LONGITUDINAL WELD - S/G END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-008	PIPE-TO-ELBOW WELD	B-J	B9.11	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-008	PIPE-TO-ELBOW WELD	B-J	B9.11	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-009 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-009 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
02-014-009 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12	UT	45	12/18/96	296-09IUT-035	ACCEP
02-014-009 SG	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12			12/18/96	296-091MT-007	ACCEP
02-014-010 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	UT	45	12/18/96	296-091 JT-035	ACCEP
02-014-010 P	ELBOW LONGITUDINAL WELD - PUMP END	B-J	B9.12	MT	N/A	12/18/96	296-091MT-007	ACCEP
-	ELBOW LONGITUDINAL WELD - S/G END	B-J	B9.12		45	12/18/06	296-09IUT-035	ACCEP





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	296-09IUT-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	296-09IUT-035	ACCE 91
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	296-09IUT-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	296-09IUT-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	296-09IUT-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	296-09IUT-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	296-09IUT-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	296-09IUT-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								n mele X - e an e wa
02-016-001	12" SCH 160 NOZZLE-TO PIPE	B-J	B9.11	UT	45°	12/17/96	296-09IUT-032	ACCEPT
02-016-001	12" SCH 160 NOZZLE-TO PIPE	B-J	B9.11	UT	45°	12/17/96	296-09IUT-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	296-09IUT-032	ACCEPT
02-016-004	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/17/96	296-09IUT-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	296-09TUT-032	ACCEPT
02-016-015	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	450	12/17/96	296-09IUT-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
62-016-016	12" SCH 160 PIPE-TO-NOZZLE	B-J	B9.11	UT	45°	12/17/96	296-09IUT-032	ACCEPT
02-016-016	12" SCH 160 PIPE-TO-NOZZLE	B-J	B9.11	UT	45°	12/17/96	296-09IUT-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
<b>ZONE:</b> 17								
02-017-021	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-017	ACCEPT
02-017-021	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/11/96	296-09IUT-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	296-09IUT-017	ACCEPT
02-017-022	12" SCH 160 ELBOW-TO-PIPE	B-J	B9 11	UT	45°	12/11/96		
State (11) on a second second	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11			12/11/96		
02-017-022	12 SCH TOU ELDUW-TU-FIFE	D+1	D9.11	5.1	14/13	1 de/ 1 1/ 201	230-0311 1-000	nevul



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	296-091PT-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	296-091PT-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	296-091PT-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	296-091PT-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	296-091PT-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	296-091PT-000	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	296-09TUT-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	296-091PT-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
00 010 004	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEPT
02-018-024	12ª SCU 160 PIPE TO EL DOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-024	12" SCH 160 PIPE-TO-ELBOW						with the second second second	
	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEPT
02-018-025	and a second	B-J B-J	B9.11 B9.11	PT		12/12/96		
02-018-025 02-018-025	12" SCH 160 PIPE-TO-ELBOW	and the second states of the				12/12/96		ACCEPT
02-018-025 02-018-025 02-018-025	12" SCH 160 PIPE-TO-ELBOW 12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96 12/12/96	296-09IPT-013	ACCEPT ACCEPT







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	ACCEP
02-018-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEP
02-018-027	12" SCH 160 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEP
02-018-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEP
02-018-028	2" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/12/96	296-09IUT-018	ACCEP
02-018-028	12" SCH 160 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-013	ACCEP
02-018-082	VARIABLE SPRING (FORMERLY 02-018-083)	F-A	F1.10C	VT-3	N/A	12/11/96	296-09IVT-008	ACCEP
ZONE: 20								
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	UT	43	12/19/96	296-091UT-051	ACCEP
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	UT	45	12/19/96	296-091UT-051	ACCEP
02-020-041	12" SCH 160 PIPE-TO-SAFE END	B-J	B9.11	PT	N/A	12/18/96	296-091PT-029	ACCEP
02-020-087-F	GUIDE & Y-STOP	F-A	F1.10B	VT-3	N/A	12/09/96	296-09IVT-006	ACCEP
02-020-087-1	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	BK1	B10.10	PT	N/A	12/09/96	096-091PT-002	ACCEP
02-020-088-F	Y-STOP	F-A	F1.10A	VT-3	N/A	12/09/96	296-09IVT-006	ACCEP
02-020-088-1	Y-STOP W/INTEGRALLY WELDED LUGS	BK1	B10.10	PT	N/A	12/09/96	096-091PT-002	ACCEP
ZONE: 22								
02-022-002	3" SCH 160 PIPE-TO-ELBOW	B-J	B9.21	PT	N/A	12/21/96	296-091PT-032	ACCEP
02-022-003	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PT	N/A	12/21/96	296-091PT-032	ACCEP
02-022-016	LOWER BONNET LOWER WELD (DWG NO SO23-950-148-3)	BM1	B12.40	PT	N/A	12/20/96	296-091PT-027	ACCEP
02-022-017	LOWER BONNET UPPER WELD (DWG NO SO23-950-148-3)	BM1	B12.40	PT	N/A	12/20/96	296-091PT-027	ACCEP
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	ACCEP
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-290	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-091PT-012	ACCEP
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-300	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	PT	N/A	12/12/96	296-091PT-012	ACCEP
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	UT	450	12/13/96	296-09IUT-021	ACCEP
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-310	4" SCH 120 PIPE-TO-GATE VALVE MU975	B-J	B9.11	PT	N/A	12/12/96	296-091PT-012	ACCEP
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-021	ACCEP
02-022-330	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-091PT-012	ACCEP
ZONE: 24								
02-024-051	SWAY STRUT	F-A	F1.10A	VT-3	N/A	12/13/96	296-09IVT-016	ACCEP
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.1i	UT	45°	12/13/96	296-09IUT-022	ACCEP
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	UT	45°	12/13/96	296-09IUT-022	ACCEP
02-024-080	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/12/96	296-09IPT-011	ACCEP







ISI ID NO.	Area Description	Cat	ltem	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
62-024-140	4" SCH 120 PIPE-TO-ELBOW	B-J	B9.11	PT	N/A	12/19/96	296 (19) PT-024	ACCEPT
02-024-150	4" SCH 120 ELBOW-TO-PIPE	B-J	B9.11	UT	45	12/19/96	296-097UT-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	B9.11	PT	N/A	12/19/96	296-091PT-024	ACCEPT
ZONE: 26								
02-026-026	2" SCH 160 PIPE-TO-TEE	B-J	B9.21	PT	N/A	12/09/96	096-091PT-003	ACCEPT
02-026-027	2" SCH 160 TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/09/96	096-091PT-003	ACCEPT
02-026-032	2" SCH 160 PIPE-TO-VAL VE	B-J	B9.21	PT	N/A	12/09/96	096-091PT-003	ACCEPT
02-026-034	VERTICAL SUPPORT & GUIDES	F-A	F1.10E	8 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	296-091PT-025	ACCEPT
02-028-017A	2" SCH 160 PIPE-TO-REDUCING TEE	B-J	B9.21	PT	N/A	12/19/96	296-091PT-025	ACCEPT
02-028-018A	2" SCH 160 REDUCING TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/19/96	296-091PT-025	ACCEPT
02-028-026	SNUBBER ATTACHED TO VALVE	F-A	F1.400	VT-3	N/A	12/14/96	296-09IVT-014	ACCEPT
02-028-027	SNUBBER ATTACHED TO VALVE	F-A	F1.400	VT-3	N/A	12/14/96	296-09IVT-014	ACCEPT
ZONE: 30							A Surf Property in the Surface State State	
02-030-006	REDUCER-TO-3" SCH 160 PIPE	B-J	B9.21	PT	N/A.	.2/12/96	296-091PT-010	ACCEPT
02-030-007	3" SCH 160 PIPE-TO-TEE	B-J	B9.21	PT	N/A	12/12/96	296-091PT-010	ACCEPT
02-030-011	2" SCH 160 PIPE-TO-VALVE	B-J	B9.21	PT	N/A	12/12/96	296-091PT-010	ACCEPT
02-030-017	VARIABLE SPRING	F-A	F1.100	VT-3	N/A	12/12/96	296-09IVT-010	ACCEP
ZONE: 32							at scenario antoin the standards	
02-032-001	2* SCH 160 NOZZLE-TO-PIPE	B-J	B9.21	P.J.	N/A	12/19/96	296-091PT-023	ACCEP
02-032-012	2" SCH 160 PIPE-TO-TEE	B-J	39.21	PT	N/A	12/17/96	296-091PT-018	ACCEP
02-032-013	2" SCH 160 TEE-TO-PIPE	B-J	B9.21	PT	N/A	12/17/96	296-091PT-018	ACCEP
02-032-024	VERTICAL SUPPORT	F-A	F1.104	A VT3	N/A	12/19/96	296-091VT-022	ACCEP
ZONE: 35						DINE CONTRACTOR		
02-035-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.1	4 UT	0°		296-09IUT-025	
02-035-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.1	4 UT	22RL	12/13/96	296-09TUT-025	ACCEP
ZONE: 36			NEW MARKANING AND		and second second			constant a replacement
02-036-004	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40/	4 VT-3	N/A	12/14/96	296-09IVT-015	ACCEP
02-036-005	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40A	A VT-3	N/A	12/14/96	296-09IVT-015	ACCEP
02-036-006	VERTICAL SUPPORT - COLUMN ASSEMBLY	F-A	F1.40/	A VT-3	N/A	12/14/96		
02-036-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.1	4 UT	0°	12/13/96		
02-036-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.1	4 UT	22RL	12/13/96		
02-036-015	REACTOR COOLANT PUMP STUD	BG1	B6.18	0 UT	0	02/09/96	296-09IUT-010	ACCEP
02-036-016	REACTOR COOLANT PUMP STUD	BG1	B6.18	0 UT	0	02/09/96	296-09IUT-010	ACCEP





Area Description

ISI ID NO.

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

Scan

Cat Item Method

Exam

Angle 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. SO23-922-157)	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. SO23-922-157)	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. SO23-922-157)	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. SO23-922-157)	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	296-0917-004	ACCEPT
02-036-088	HEAT EXCHANGER TO DRIVER MOUNT STUD	RGO	B7 60	VT-1	NIA	12/00/06	206.00177.004	ACCEPT

02-03 02-03 02-036-088 HEAT EXCHANGER-TO-DRIVER MOUNT STUD BG2 B7.60 VT-1 N/A 12/09/96 296-09IVT-004 ACCEPT (DWG. NO. SO23-922-157) 02-036-089 HEAT EXCHANGER-TO-DRIVER MOUNT STUD BG2 B7.60 VT-1 N/A 12/09/96 296-09IVT-004 ACCEPT (DWG NO SO23-922-157) 02-036-112 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG VT-1 BG2 B7.60 N/A 12/20/96 296-09IVT-027 ACCEPT NO. S023-922-231-6) 02-036-113 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. BG2 B7.60 VT-1 N/A 12/20/96 296-09IVT-027 ACCEPT NO. S023-922-231-6) 02-036-114 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG BG2 B7.60 VT-1 N/A 12/20/96 296-09IVT-027 ACCEPT NO. S023-922-231-6) 02-036-115 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. BG2 B7.60 VT-1 12/20/96 296-09IVT-027 ACCEPT N/A NO. S023-922-231-6) (2-036-110 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. BG2 B7.60 VT-1 N/A 12/20/96 296-09IVT-027 ACCEPT NO. S023-922-231-6) 02-036-117 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG BG2 B7.60 VT-1 N/A 12/20/96 296-09IVT-027 ACCEPT NO. S023-922-231-6) 02-036-118 SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. BG2 B7.60 VT-1 N/A 12/20/96 296-09IVT-027 ACCEPT NO S023-922-231-6)





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. \$023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-120	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. 8023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-121	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. \$023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEPT
02-036-122	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. 8023-922-231-6)	BG2	B7 60	VT-1	N/A	12/20/96	296-09171-027	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	ACCEP
02-036-124	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. 8023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEP
02-036-125	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. 8023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEP
02-036-126	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG NO. 8023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/95	296-09IVT-027	ACCEP
02-036-127	SEAL HOUSING-TO-FLANGE CAPSCREW (DWG. NO. 8023-922-231-6)	BG2	B7.60	VT-1	N/A	12/20/96	296-09IVT-027	ACCEP
ZONE: 37								
02-037-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0°	12/13/96	296-09IUT-024	ACCEP
02-037-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	12/13/96	296-09IUT-024	ACCEP
ZONE: 38								
02-038-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	0	01/17/97	296-09IUT-052	ACCEP
02-038-011	MOTOR FLYWHEEL BORE AND KEYWAY	N/A	RG1.14	UT	22RL	01/17/97	296-09IUT-052	ACCEP
ZONE: 39								
02-039-009	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PΤ	N/A	12/12/96	296-091PT-009	ACCEP
02-039-010	3" SCH 160 PIPE-TO-ELBOW	B-J	B9.21	PT	N/A	12/12/96	296-091PT-009	ACCEP
02-039-011	3" SCH 160 ELBOW-TO-PIPE	B-J	B9.21	PT	N/A	12/12/96	296-091PT-009	ACCEP
02-039-012	3" SCH 160 PIPE-TO-VALVE	B-J	B9.21	PT	N/A	12/12/96	296-091PT-009	ACCEP
02-039-014	3" SCH 160 VALVE-TO-PIPE	B-J	B9.21	PT	N/A	12/12/96	296-091PT-009	ACCEP
02-039-070-F	GUIDE	F-A	F1.10B	VT-3	N/A	12/12/96	296-09IVT-011	ACCEP
ZONE: 47				· · · · · · · · · · · · · · · · · · ·	1			
02-047-031	6" SCH 120 TEE-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEP
02-047-031	6" SCH 120 TEE-TO-PIPE	CF2	C5.51	MT	N/A	12/14/96	296-091MT-009	ACCEP
02-047-032	6" SCH 120 PIPE-TO-VALVE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEP
02-047-032	6" SCH 120 PIPE-TO-VALVE	CF2	C5.51	MT	N/A	12/14/96	296-091MT-009	ACCEP
02-047-037	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	296-09IUT-026	ACCEP
02-047-037	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	MT	N/A		296-091MT-009	
02-047-037A	6" SCH 120 PIPE-TO-PIPE	CF2	C5.51	UT	45°	12/14/96	and the second second second second	
02-047-038	6" SCH 120 PIPE-TO-ELBOW	CF2	C5.51	UT	45°	12/14/96		
02-047-039	6" SCH 120 ELBOW-TO-PIPE	CF2	C5.51	UT	45°	12/14/96		
02-047-039A	6" SCH 120 PIPE-TO-PIPE	CF2		UT	45		296-09IUT-044	







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
02-047-053-1	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	
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	
02-049-022	6" SCH 80 VALVE STUB END-TO-PIPE	CF2	C5.51	UT	45	12/06/96	296-09IUT-002	the second residence with the second
02-049-027-F	Y-STOP	F-A	F1.20A	VT-3	N/A	12/12/96	296-09IVT-009	The second s
02-049-028-F	Y-STOP	F-A	F1.20A		1 and a second	12/12/96	296-09IVT-009	
02-049-030-F	SNUBBERS	F-A	F1.20C	Constant sector and sector as		12/12/96	296-09IVT-009	The second se
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		296-09TUT-001	
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		and at the second
02-052-024	8" SCH 80 PIPE-TO-VALVE	CF2	C5.51	UT			296-09IUT-001	
02-052-025A	4" SWEEPOLET-TO-34" HEADER		C5.81	MT			296-091MT-004	
WHE MARKE WELLER					-		Contraction of the Allowed of Allowed State	
02-052-027	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UI	45°	12/00/90	296-09101-005	ALCEPT
and the state of t	HEADER EXTRUSION-TO-6" PIPE 34" HEADER-TO-HEADER		C5.51 C5.51	UT			296-09IUT-005 296-09IUT-006	
02-052-027 02-052-028	and an address of the second	CF2	C5.51 C5.51 C5.52	UT	45°	12/07/96	296-09IUT-006 296-09IUT-006	ACCEPT







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	ACCEP
02-052-031	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45°	12/06/96	296-09IUT-005	ACCEP
02-052-032	34" HEADER-TO-CAP	CF2	C5.51	UT	45°	12/06/96	296-09IUT-019	ACCEPT
02-052-032A-S	GLONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEP
02-052-032A-S	VLONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/07/96	296-09IUT-006	ACCEP
02-052-033	6" SCH 80 PIPE-TO-HEADER EXTRUSION	CF2	C5.51	UT	45	12/07/96	296-09IUT-007	ACCEP
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-S	GLONGITUDINAL - REDUCING TEE LONG SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEP
02-052-038A-T	BLONGITUDINAL - REDUCING TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-038B-S	GLONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038B-S	VLONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEP
02-052-038C-S	VLONGITUDINAL WELD-REDUCING TEE SH SEAM	CF2	C5.52	UT	45	12/19/96	296-09IUT-040	ACCEPT
02-052-038C-T	BLONGITUDINAL WELD - REDUCING TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-040	40" TEE-TO-TEE	CF2	C5.51	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-040	40" TEE-TO-TEE	CF2	C5.51	UT	60°	12/09/96	296-09IUT-011	ACCEP
02-052-041A-S	GLONGITUDINAL - TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-041A-T	BLONGITUDINAL - TEE LONG SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-041B-S0	GLONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-041B-S	VLONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-041C-S	VLONGITUDINAL WELD - TEE SHORT SEAM	CF2	C5.52	UT	45	12/09/96	296-09IUT-011	ACCEP
02-052-041C-T	BLONGITUDINAL 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	ACCEP
02-052-042A-S	G26" ELBOW BODY WELD - OUTSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEP
02-052-042A-S	V26" ELBOW BODY WELD - OUTSIDE RADIUS	CF2	C5 52	UT	45	12/07/96	296-09IUT-003	ACCEP
02-052-042B-S	G 26" ELBOW BODY WELD - INSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEP
02-052-042B-S	V26" ELBOW BODY WELD - INSIDE RADIUS	CF2	C5.52	UT	45	12/07/96	296-09IUT-003	ACCEP
02-052-044	26" ELBOW-TO-HEADER	CF2	C5.51	UT	45	12/07/96	296-09IUT-003	ACCEP
02-052-044A-S	GLONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/10/96	296-09IUT-012	ACCEP
02-052-044A-S	VLONGITUDINAL WELD - HEADER SEAM	CF2	C5.52	UT	45°	12/10/96	296-09IUT-012	ACCEP
02-052-045	HEADER EXTRUSION-TO-6" PIPE	CF2	C5.51	UT	45	12/07/96	296-09IUT-007	ACCEP
02-052-111-F	GUIDE & Y-STOP	F-A	F1.20E	3 VT-3	N/A	12/07/96	296-09IVT-001	ACCEP
02-052-111-J	GUIDE & Y-STOP W/INTEGRALLY WELDE. LUGS	C-C	C3.20	MT	N/A	12/07/96	296-091MT-003	ACCEPT
ZONE: 65	at day so a fact the family many plant of the second second second second second second second second second s			-			or the surface of the surface of the surface	
	AXIAL STOP			A VT-3			296-09IVT-018	
02-065-1020-I	AXIAL STOP W/INTEGRALLY WELDED LUGS	-	C3.20	and the second second		a reason of the second second	296-091PT-015	
02-065-1120-F			-	VT-3			296-09IVT-018	
02-065-1120-I	AXIAL STOP W/INTEGRALLY WELDED LUGS	and generation	C3.20	and the second se		- Indene spitzent	296-091PT-015	
and the second s	GUIDE & AXIAL STOP	And in case of the local division of	F1.20E	3 VT-3	N/A	12/07/96	296-09IVT-002	ACCEPT
02-065-1150-1	GUIDE & AXIAL STOP W/INTEGRALLY WELDED	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEPT



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	296-09IVT-002	ACCEPT
02-065-1170-1	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	VΓ-3	N/A	12/07/96	296-09IVT-002	ACCEPT
02-065-1220-1	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
02-065-1380-1	GUIDE & Y-STOP W/INTEGRALLY WELDED PLATE	C-C	C3.20	PT	N/A	12/06/96	296-091PT-001	ACCEP
02-065-1390-F	AXIAL STOP	F-A	F1.20A	VT-3	N/A	12/07/96	296-09IVT-002	ACCEPT
02-065-1390-1	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	296-09IVT-002	ACCEPT
02-065-1400-1	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
0 <b>2-068-</b> 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	296-09IVT-007	ACCEP
02-072-137-I	Y-STOP W/INTEGRALLY WELDED ATTACHMENT	C-C	C3.20	PT	N/A	12/10/96	296-091PT-005	ACCEP
02-072-152-F	GUIDE & Y-STOP	F-A	F1.20B	VT3	N/A	12/21/96	296-091VT-023	ACCEP
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	ACCEP
02-072-158-F	3-WAY STOP	F-A	F1.20B	VT-3	N/A	12/10/96	296-09IVT-007	ACCEP
02-072-158-I	3-WAY STOP W/INTEGRALLY WELDED LUGS	C-C	C3.20	PT	N/A	12/10/96	296-091PT-005	ACCEP
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				State of the second state of the second	and the second			
02-080-001	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	44	12/19/96	296-09IUT-037	ACCEPT
02-080-001	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	45	12/19/96	296-09IUT-037	ACCEPT
02-080-002	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	44	12/19/96	296-09IUT-037	ACCEP
02-080-002	TUBESHEET-TO-SHELL WELD	C-A	C1.30	UT	45	12/19/96	296-09IUT-037	ACCEP
02-080-003	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-09IUT-037	ACCEP
02-080-003	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-09IUT-037	ACCEPT
02-080-004	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-09IUT-038	ACCEP
02-080-004	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-09IUT-038	ACCEP
02-080-005	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	44	12/19/96	296-09IUT-038	ACCEP
02-080-005	HEAD CIRCUMFERENTIAL WELD	C-A	C1.20	UT	45	12/19/96	296-09IUT-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







ISI ID NO.	Area Description	Cat	ltem	Method	Scan Angle	Exam Date	Report No	Results
02-080-018	INTEGRALLY WELDED ATTACHMENT	C-C	C3.10	PT	N/A	12/18/96	296-091PT-020	ACCEPT
ZONE: ST								
RCP STUD PO	QD		a halo na fanoa da dagante	UT	0	02/09/96	296-09IUT-009	ACCEPT





# UNIT 2 CYCLE 9, SYSTEM PRESSURE TESTS

SYSTEM .	PLANT LOCATION	PRESSURE REQD/A CT-psi	TEMPERATURE REQD/ACT-0F	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 / ≥ 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 SectionXI

1.	Owner:	Southern Ca	lifornia Edison Company	Unit:	2	
			t Grove Avenue	MO:	93091485001	
		Rosemead, (	California 91770	Rspec:	245-93 R1	
2. Plant:	W-1			P&ID:	40112C G-7	
	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		N-5:	S2-1204-34		
3.	Work Pe	rformed by:	Southern California Edison Company		ode Symbol Stam ization No:	ip: N/A N/A
4.	Identifica	ation of System	Safety Injection and Shutdown Cooling	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: <u>ASME Section III, Class 2, 1977 Edition, S'77 Addenda (Valve), 1974 Edition, S'74</u> Addenda (Fittings), 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
1/2" 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	Ht 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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 m., (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 installed and dated by the Owner or Owner's designed and the ALA.

9. Remarks CR-89-003 reconciles the replacement valve which was certified to ASME 2012, 1983 Edition, S'85 Addenda.

CERTIFICATE OF CO	ADITANCE	and a second state and a second of the second distance in the second second second second second second second
	AT LIVIACE	
eport are correct and this	replacement confor	ms to the rules
Expiration Date	e: N/A	
ervising ASME Codes Er	gineer Date:	1/21/85
CERTIFICATE OF INSP	ECTION	
, and state that active measures described I. stor nor his employer make ibed in this Owner's Repo	to the best of my know in this Owner's Report es any warranty, expro- rt. Furthermore, neith	wledge and belief, the Owner t in accordance with the essed or implied, concerning the
		A 11 1 1 1 A
ny personal injury or prop	city damage of a loss	of any kind arising from or
	CERTIFICATE OF INSPI on issued by the National I ployed by <u>Arkwright Mu</u> the components described <u>6</u> , and state that ective measures described I.	CERTIFICATE OF INSPECTION on issued by the National Board of Boiler and Pr ployed by <u>Arkwright Mutual Insurance Com</u> the components described in this Owner's Repor

FORM NIS-2 C	WNER'S	REPORT	FOR	REPAIRS	OR	REPLACEMENTS	
As Required by the Provisions of the ASME Code SectionXI							

-			Sheet 1 of 1	All and an all of the strength of the distribution of the international of the international distribution of th	-
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: DCP:	2 94082138001 2-6683.04SP	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		: 061-94,072-94R1,073-94R1 : 40112B S2-1204-12	
3.	Work Pe	rformed by: Southern California Edison Company	Autho	Code Symbol Stamp: N/A rization No: N/A	
4	Identifica	ation of System Safety Injection and Shutdown Cooling	Expira	ation Date: N/A	

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

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

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

Name of Component	Name Of Manufacturer	Manufacturer Seriai No.	National Board No.	Other Idestification	Year Built	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	5.2-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



Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is \$ 1/2 in. x 11 in., (2) information in Items 1 through  $\delta$  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. NOTE

9. Remarks None.

COMPLIANCE this <u>replacement</u> conforms to the rules repair or replacement
repair or replacement
Date: N/A
Date: N/A
Date. Mars
es Engineer Date: C/25/36
NSPECTION
t Mutual Insurance Company of ribed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ribed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning the Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or <u>ILO2</u> <u>California</u> National Board, State, Province, and Endorsements
I

		FORM NIS-2 OWNER'S REPORT FOR RE As Required by the Provisions of the ASME Co		OR REPLACEMENTS	
			Sheet I of I		1
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	94082140001 96031968000	
		Rosemead, California 91770	DCP:	2-6683.04SP	
			Rspec:	062-94	
2.	Plant:	Sai Onofre Nuclear Generating Station	P&ID:	40112B	
		San Clemente, California 92674-0128	N-5:	S2-1204-12	
3.	Work Pe	rformed by: Southern California Edison Company			
				Code Symbol Stamp: N/A rization No: N/A	
4	Identifica	ation of System Safety Injection and Shutdown Cooling	Expira	tion Date: N/A	

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 96031968. Lisega provided a procedure (SO23-409-2-10-28) for performing field shortening of the turnbuckle portion of the rigid srut. 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 ALA.

9. Remarks None.

	ua Reporta are evallable on-aito)
CERTIFICATE O	FCOMPLIANCE
e certify that the statements made in the report are correct and the ASME Code, Section XI.	this <u>replacement</u> conforms to the rules repair or replacement
pe Code Symbol Stamp: N/A	
gned: <u>UML: UM</u> Supervising ASME Co Owner or Owner's Designee, Title	on Date: N/A wdes Engineer Date: 6/18/96
CERTIFICATE OF	DISPECTION
as performed examinations and taken corrective measures desc equirements of the ASME Code, Section XI. y signing this certificate, neither the Inspector nor his employer caminations and corrective measures described in this Owner's nployer shall be liable in any manner for any personal injury of connected with this inspection.	the that to the best of my knowledge and belief, the Owner cribed in this Owner's Report in accordance with the er makes any warranty, expressed or implied, concerning the 's Report. Furthermore, neither the Inspector nor his or property damage or a loss of any kind arising from or
Inspector's Signature	National Board, State, Province, and Endorsements
1	

*****			Sheet 1 of 1	
1.	Owner:	Southern California Edison Company	Unit: 2	
		2244 Waln: Grove Avenue	MO: 94082254000	
		Rosemead, ' ifornia 91770	DCP: 2-6683.04SP	
~	Direct	San Onofre Nuclear Generating Station	Rspec: 075-94	
4.	Plant:	San Clemente, California 92674-0128	P&ID: 40112B	
		San Clemente, Camornia 520/4-0120	N-5: S2-1204-12	
3.	Work Pe	rformed by: Southern California Edison Company	ny	
			Type Code Symbol Stamp: N/A	
			Authorization No: N/A	
4.	Identifica	ation of System Safety Injection and Shutdown Cool	oling Expiration Date: N/A	

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

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 Mazufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	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 lasts, sketches, or drawings may be used provided (1) size is  $8 \cdot 1/2$  in  $\times 11 \text{ in}_{-}(2)$  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.

 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	Data Reports	are available on-site)	[

	CERTIFICATE OF	COMPLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and th	nis <u>replacement</u>	conforms to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration	Date: N/A	
Signed: <u>Al Multiperson</u> Signed: <u>Owner or Owner's Designee</u> , Title	upervising ASME Code e	<u>s Engineer</u> D	ate: 6/12/96
	CERTIFICATE OF D		
, the undersigned holding a valid commis	istica issued by the Natio	nal Board of Boile	and Desame Vascal Instantant and
Contraction of the second second second	the second of the second	and aroth a of aroth	and riessure vessel inspectors and
he State or Province of <u>California</u> , and e	mployed by Arkwright	Mutual Insurance	ce Company of
he State or Province of <u>Califort ia</u> and e <u>Waltham</u> , <u>Massachusetts</u> have inspected	mployed by <u>Arkwright</u> d the components descri	Mutual Insurance	re Company of s Report during the period
he State or Province of <u>Californ</u> is and e Waltham, <u>Massachusetts</u> have inspected Will 95 to 6/19/	d the components descri 96, and state	Mutual Insurance bed in this Owner' that to the best of a	e Company of s Report during the period my knowledge and belief, the Owner
he State or Province of <u>Californ</u> is, and e <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>1/1/95</u> to <u>19</u> tas performed examinations and taken for	the components descri <u>96</u> , and state rrective measures descri	Mutual Insurance bed in this Owner' that to the best of a	e Company of s Report during the period my knowledge and belief, the Owner
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he State or Province of <u>Californ is</u> , and e <u>Waltham, Massachusetts</u> have inspected <u>1955</u> to <u>19</u> tas performed examinations and taken con equirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	mployed by <u>Arkwright</u> d the components descri <u>Gamma</u> , and state mective measures descri XI. pector nor his employer is scribed in this Owner's F	Mutual Insurance bed in this Owner' that to the best of a bed in this Owner' makes any warrant Report. Furthermo	ere Company of s Report during the period ny knowledge and belief, the Owner s Report in accordance with the y, expressed or implied, concerning th re, neither the Inspector nor his
he State or Province of <u>Californ is</u> , and e <u>Waltham, Massachusetts</u> have inspected <u>waltham, Massachusetts</u> have inspected to <u>waltham</u> to <u>waltham</u> to <u>waltham</u> to <u>waltham</u> tas performed examinations and taken con equirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	mployed by <u>Arkwright</u> d the components descri <u>26</u> , and state mective measures descri XI. pector nor his employer is scribed in this Owner's For any personal injury or p	Mutual Insurance bed in this Owner' that to the best of a bed in this Owner' makes any warrant Report. Furthermo property damage of	ere Company of s Report during the period ny knowledge and belief, the Owner s Report in accordance with the y, expressed or implied, concerning th re, neither the Inspector nor his
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# FORM NIS-2 OWNER'S REPOR 1 FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code SectionXI

1	Oumer	Southern California Edison Company	Unit:	2	
**	Owner:	2244 Walnut Grove Avenue	MO:	95040232000	
		Rosemead, California 91770	Rspec:	GEN-106, R2	
			P&ID:	40111A	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1201-3	
3	Work Pe	erformed by: Southern California Edison Company	Author	Code Symbol Stam rization No:	p: N/A N/A N/A
4	Identifi	cation of System: Reactor Coolant	Expira	tion Date:	IN/M

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 dition. 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	Replaced or Replacement	ASME Code Stamped Yes/No
	D. Labor	701-N-0557	N/A	S21201MP004	1977		Yes
36" Reactor Coolant Pump	Byron Jackson	101-14-0557	1				N'es
RCP Pump	Bingham Willamette	1714880-4	1170	RSO-3476-86, SO23-CART-#20	1986	Replaced	Yes
Mechanical Seal RCP Pump Mechanical Seal	Bingharn Willame.te	1659057-11	1219	RSO-2320-88, SO23-CART-#25	1986	Replacement	Yes

7. Description of Work:

The RCF 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: <u>System Leakage Pressure Test</u> 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 ii. x 11 iii., (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'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 of the ASME Code, Section XI.	e report are correct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u><u><u>Millip</u></u><u>Signed</u> S Owner or Owner's Designee, Title</u>	Supervising ASME Codes Engineer Date: 6/11/97
	CERTIFICATE OF INSPECTION
the State or Province of <u>California</u> , and e Waltham, Massachusetts have inspecte	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors an employed by <u>Arkwright Mutual Insurance Company</u> of ed, the components described in this Owner's Report during the period
the State or Province of <u>California</u> and e Waltham, Massachusetts have inspecte <u>11/27/96</u> to <u>06/11</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the AZI.
the State or Province of <u>California</u> and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>1//27/96</u> to <u>06/11</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	employed by <u>Arkwright Mutual Insurance Company</u> of ed, the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>1127796</u> to <u>0611</u> has performed examinations and taken do requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection.	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the a XI. spector nor his employer makes any warranty, expressed or implied, concerning escribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or
the State or Province of <u>California</u> and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>1127796</u> to <u>0611</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection.	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning escribed in this Owner's Report. Furthermore, neither the Inspector por his

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

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	95060405000		
		Rosemead, California 91770	Rspec:	166-95		
	-		P&ID:	40112C-(E7)		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1204-11		
3.	Work Pe	rformed by: Southern California Edison Company		Code Symbol Stamp:		
				ization No:	N/A	
4.	Identifica	ation of System Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A	

- 5. (a) Applicable Construction Code: ASME Section III. Class 2, 1974 Edition, S.74 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	Replaced or 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 lasts, 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.

9. Remarks None.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the ASME Code, Section XI.	e report are correct and this <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Alleille</u> Owner or Owner's Designee, Tr	Supervising ASME Codes Engineer Date: 6/18/96
	CERTIFICATE OF INSPECTION
Waltham, Massachusetts have inspec	employed by <u>Arkwright Mutual Insurance Company</u> of ted the components described in this Owner's Report during the period
has performed examinations and taken a equirements of the ASME Code, Section	
has performed examinations and taken a equirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d	orrective measures described in this Owner's Report in accordance with the
as performed examinations and taken a equirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d employer shall be liable in any manner is	orrective measures described in this Owner's Report in accordance with the in XI. spector nor his employer makes any warranty, expressed or implied, concerning escribed in this Owner's Report. Furthermore, neither the Inspector nor his

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

As Required by the Provisions of the ASME Code Section XI

1.	Owner:	2244 Walnu	lifornia Edison Company at Grove Avenue	Unit: MO:	2 95060652000	
		Rosemead,	California 91770	Rspec:	147-95	
2.	Plant:		Nuclear Generating Station te, California 92674-0128	P&ID: N-5:	40124B (D-3) S2-1208-10	
3.	Work Pe	rformed by:	Southern California Edison Company	Author	ode Symbol Stamp ization No:	N/A N/A
4.	Identifica	tion of System	Chemical and Volume Control	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III. Class 2, 1974 Edition, S' 1975 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
Discharge Accumulator	Greer Hydraulics Inc.	GHI-2981	234	S21208MW219	1978		Yes
Blaider 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 lasts, aketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in literus 1 through 6 or this report is included on each sheet. 3) each sheet is numbered and the number of abeets 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.

	ppicebie Manufacturer's Deta Reports are evaluable on-site)
C	ERTIFICATE OF COMPLIANCE
We certify that the statements made in the repo of the ASME Code, Section XI.	ort are correct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Signed: <u>Multiples</u> Designee, Title	Expiration Date: N/A vising ASME Codes Engineer Date: 6/12/96
CE	RTIFICATE OF INSPECTION
the State or Province of <u>Lalifornia</u> , and emplo Waltham, Massachusetts have inspected the	issued by the National Board of Boiler and Pressure Vessel Inspectors and oyed by <u>Arkwright Mutual Insurance Company</u> of components described in this Owner's Report during the period
the State or Province of <u>alifornia</u> , and emploid Waltham, Massachusetts have inspected the <u>construction</u> to <u>construction</u> has performed examinations and taken correction requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector examinations and corrective measures described	yed by Arkwright Mutual Insurance Company of
the State or Province of <u>alifornia</u> , and employ Waltham, Massachusetts have inspected the <u>bas</u> performed examinations and taken correction requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector examinations and corrective measures describe employer shall be liu ble in any manner for any	by dy Arkwright Mutual Insurance Company of components described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner ive measures described in this Owner's Report in accordance with the r nor his employer makes any warranty, expressed or implied, concerning th ed in this Owner's Report. Furthermore, neither the Inspector nor his

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

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	95060821000	
		Rosemead, California 91770	Rspec:	EREF-0398	
			P&ID:	40124B (C-5)	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1208-5	
3	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stam ization No:	p: N/A N/A
4	Identifica	ation of System Chemical and Volume Control	Expirat	ion Date:	N/A

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

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		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 m., (2) information in lisms 1 through 6 on this report is included on each sheet, 3) each abeet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is nuthied and dated by the Owner or Owner's designee and the AIA.

	CERTIFICATE OF	COMPLIANCE	
We certify that the statements made in the rep f the ASME Code, Section XI.	port are correct and t	his <u>replacement</u> repair or replacem	conforms to me rules
ype Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration	Date: N/A	
igned: <u>Super</u> Owner or Owner's Designee, Title	rvising ASME Code	<u>es Engineer</u> Da	te:6/12/96
C	ERTIFICATE OF D	NSPECTION	
Valtham, Massachusetts have inspected th 10/23/95 to 0/14/9	In and state	the start of the based of	webout normile me berion
as performed examinations and taken correc- equirements of the ASME Code, Section XI y signing this certificate, neither the Inspect caminations and corrective measures descri- nployer shall be liable in any manner for an	tive measures descr or nor his employer bed in this Owner's J	ibed in this Owner's makes any warranty Report. Furthermon	Report in accordance with the , expressed or implied, concerning the e, weither the Inspector nor his
as performed examinations and taken correc- equirements of the ASME Code, Section XI by signing this certificate, neither the Inspect xaminations and corrective measures descri- mployer shall be lisble in any manner for an	tive measures descr or nor his employer bed in this Owner's J	ibed in this Owner's makes any warranty Report. Furthermon property damage or 1862	Report in accordance with the , expressed or implied, concerning the e, weither the Inspector nor his
has performed examinations and taken correct equirements of the ASME Code, Section XI By signing this certificate, neither the Inspect examinations and corrective measures descri- amployer shall be liable in any manner for an connected with this inspection.	tive measures descr or nor his employer bed in this Owner's J y personal injury or	ibed in this Owner's makes any warranty Report. Furthermon property damage or 1862	Report in accordance with the c, expressed or implied, concerning the e, weither the Inspector nor his a loss of any kind arising from or California
as performed examinations and taken correct equirements of the ASME Code, Section XI by signing this certificate, neither the Inspect examinations and corrective measures descri- mployer shall be liable in any manner for an connected with this inspection.	tive measures descr or nor his employer bed in this Owner's J y personal injury or	ibed in this Owner's makes any warranty Report. Furthermon property damage or 1862	Report in accordance with the c, expressed or implied, concerning the e, weither the Inspector nor his a loss of any kind arising from or California
as performed examinations and taken correct equirements of the ASME Code, Section XI by signing this certificate, neither the Inspect examinations and corrective measures descri- mployer shall be liable in any manner for an connected with this inspection.	tive measures descr or nor his employer bed in this Owner's J y personal injury or	ibed in this Owner's makes any warranty Report. Furthermon property damage or 1862	Report in accordance with the c, expressed or implied, concerning the e, weither the Inspector nor his a loss of any kind arising from or California

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

As Required by the Provisions of the ASME Code Section.X

- Southern California Edison Company 1. Owner: Unit: 2 2244 Walnut Grove Avenue MO: 95060988001 Rosemead, California 91770 Rspec: EREF-0377 P&ID: 40124B (G-4) 2. Plant: San Onofre Nuclear Generating Station N-5: S2-1208-10 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A Expiration Date: N/A 4. Identification of System Chemical and Volume Control
  - 5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S'75 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
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 mitialed and dated by the Owner or Owner's designee and the AIA.

(Applaatble Manufacturer's )	Data Reports and available on-ann)
CERTIFICATE	OF COMPLIANCE
We certify that the statements made in the report are correct ar of the ASME Code, Section XI.	nd this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expirat Signed:	tion Date: N/A Codes Engineer Date: <u>6/12/96</u>
l, the undersigned holding a valid commission issued by the N	
the State or Province of <u>California</u> and employed by <u>Arkwr</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the components de <u>10/25/95</u> to <u>0/14/96</u> and s has performed examinations and taken corrective measures de	ight Mutual Insurance Company of escribed in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner
the State or Province of <u>California</u> and employed by <u>Arkwr</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the components de 10/25/95 to <u>0/14/96</u> , and s	ight Mutual Insurance Company of escribed in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner escribed in this Owner's Report in accordance with the over makes any warranty, expressed or implied, concerning the r's Report. Furthermore, neither the Inspector nor his
the State or Province of <u>California</u> and employed by <u>Arkwr</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the components de <u>10/25/95</u> to <u>0/14/96</u> , and s has performed examinations and taken corrective measures de requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his emplo examinations and corrective measures described in this Owne employer shall be liable in any manner for any personal injury connected with this inspection.	ight Mutual Insurance Company of escribed in this Owner's Report during the period tate that to the best of my knowledge and belief, the Owner escribed in this Owner's Report in accordance with the over makes any warranty, expressed or implied, concerning the r's Report. Furthermore, neither the Inspector nor his

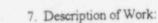
# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the	Provisions of the	ASME Code SectionX
--------------------	-------------------	--------------------

1	Owner:	Southern California Edison Company	Unit:	A		
A -	Owner.	2244 Walnut Grove Avenue	MO:	95081966000		
		Rosemead, California 91770	Rspec:	EREF-0202		
			P&ID:	N/A		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	N/A		
3.	Work Pe	rformed by: Southern California Edison Company	Author	ode Symbol Stamp ization No:	N/A	
4.	Identifica	ation of System N/A - Spare	Expira	tion Date:	N/A	

- 5. (a) Applicable Construction Code: ASME Section III. Class 2, 1974 Edition, S'74 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	Replaced or Replacement	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



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

ASME



NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 817 in x11 in. (2) information in items 1 through 6 on his eport 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 installed and dated by the Owner or Owner, data mee and the ALA.

9. Remarks None.

(Applicable Menufacture's Data Reports are evaluable on-ene)
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this of the ASME Code, Section XI. replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A
Certificate of Authorization No: N/A Expiration Date: N/A
Signed: <u>Mulfenilel</u> Supervising ASME Codes Engineer Date: <u>12/8/95</u> 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 <u>California</u> , and employed by <u>Arkwright Mutual Insurance Company</u> of <u>Waltham, Massachusetts</u> have inspected the components described in this Owner's Report during the period <u>9/13/95</u> to <u>12/8/95</u> , 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 Commissions <u>1862</u> California National Board, State, Province, and Endorsements
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Date Dec. 8, 1995

-		As Required by an environment of the Ashie Co	ODE SECTORIAL		
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 95090458000 ASME SECTIO	ON XI DATA-0089
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: N-5:	4014A (C2) S2-1301-2	
3.	Work Pe	rformed by: Southern California Edison Company		ode Syrriool Stan ization No:	np: N/A N/A
4	Identifie	cation of System: Steam Generator Blowdown Processing	Expirat	ion Date:	N/A

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

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 R1, 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: <u>System Functional Pressure Test</u> See: AR 961100998-3 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 m. x 11 m., (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 : CR-2005-93 reconciles the replacement primary and pilot plugs which were certified to ASME III, Class 2, 1986 Edition No Addenda.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the r of the ASME Code, Section XI.	report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed:Signee, Title	pervising ASME Codes Engineer Date: 6/7/97
	CERTIFICATE OF INSPECTION
the undersigned holding a valid commiss	sion issued by the National Board of Boiler and Pressure Vessel Inspectors and
the State or Province of <u>California</u> , and en Waltham, <u>Massachusetts</u> have inspected <u>09/2//96</u> to <u>06/09</u> has performed examinations and taken cor requirements of the ASME Code, Section	
the State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>09/2//96</u> to <u>06/09</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Inspectations and corrective measures des	mployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner rective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> , and en <u>Waltham, Massachusetts</u> have inspected <u>09/20/1966</u> to <u>06/09</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	mployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>197</u> , and state that to the best of my knowledge and belief, the Owner rective measures described in this Owner's Report in accordance with the XI. ector nor his employer makes any warranty, expressed or implied, concerning the cribed in this Owner's Report. Furthermore, neither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

L	Owner	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: 2 MO: 95091026000 Rspec: ASME SECTION XI DATA-0090	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: 40141A (F3) N-5: S2-1301-1	
3.	Work Pe	erformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4.	Identifi	cation of System: Steam Generator Blowdown Processing	Expiration Date: N/A	

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 ^ode Stamped Yes/No
6" 900# Control Valve	Fisher Controls	6489974	3701	2HV4054	1979		Yes
Primary Plug	Fisher Controls	PB9098-1, Ht. #32899-1	N/A	RSO-2-P-398-82, SA479 Tp.316L	N/A	Replacement	Yes
Pilot Plug	Fisher Controls	RB4212-1, Ht. #501512-1	N/A	RSO-0347-94, SA479 Tp.316L (CR-2005-93)	1994	Replacement	Yes



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

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100998-4 Pressure: NOP

Temp: N/A



NOTE Supplemental sheets in the form of lists, skotches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m., (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 : CR-2005-93 reconciles the replacement pilot plug which was certified to ASME III, Class 2, 1986 Edition No Addenda

APLIANCE         replacement         repair or replacement         :: N/A         gineer       Date:         .
repair or replacement
gineer Date: C/7/97
ECTION
tual Insurance Company of in this Owner's Report during the period to the best of my knowledge and belief, the Owner in this Owner's Report in accordance with the
es any warranty, expressed or implied, concerning the rt. Furthermore, neither the Inspector nor his erty damage or a loss of any kind arising from or
162 California
ional Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code SectionXC

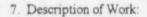
	1.	Owner:	Southern California Edison Company	Unit:	2	
			2244 Walnut Grove Avenue	MO:	95091684000	
	Rosemead, California 91770	Rspec:	EREF-0398			
2. Piant:		Dianti	San Oracha Muslaan Companyie a Station	P&ID:	40124B G-3	
	4.	Plant.	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1208-5	
	3.	<ol> <li>Work Performed by: Southern California Edison Company</li> <li>Identification of System Chemical and Volume Control</li> </ol>			ode Symbol Stamp ization No:	N/A N/A
	4.			Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S'75 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
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



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, aketches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m., (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 mitialed and dated by the Owner or Owner's designee and the ALA.

9. Remarks None.

	(Applicable	Menulacturers	Data Report	is are available on-site
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	CERTIFICATE OF COMPLIANCE
We certify that the statements mad of the ASME Code, Section XI.	the in the report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: Signed: <u><u>Multiplus</u></u> Owner or Owner's Design	Supervising ASME Codes Engineer Date: 19196
	CERTIFICATE OF INSPECTION
the State or Province of California	commission issued by the National Board of Boiler and Pressure Vessel Inspectors and a, and employed by <u>Arkwright Mutual Insurance Company</u> of
the State or Province of <u>California</u> Waltham, <u>Massachusetts</u> have in <u>9/29/95</u> to <u>/</u> has performed examinations and ta	a, and employed by <u>Arkwright Mutual Insurance Company</u> of aspected the components described in this Owner's Report during the period <u>10/9</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> Waltham, Massachusetts have in <u>9/29/95</u> to <u>//</u> has performed examinations and ta equirements of the ASME Code, S By signing this certificate, neither t examinations and corrective measure employer shall be liable in any mar	a, and employed by <u>Arkwright Mutual Insurance Company</u> of aspected the components described in this Owner's Report during the period <u>10/9</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the
Waltham, Massachusetts have in 9/29/95 to has performed examinations and ta requirements of the ASME Code, 5 By signing this certificate, neither the examinations and corrective measure	a, and employed by <u>Arkwright Mutual Insurance Company</u> of hspected the components described in this Owner's Report during the period <u>10/9(a</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the Section XI. the Inspector nor his employer makes any warranty, expressed or implied, concerning the mes described in this Owner's Report. Furthermore, neither the Inspector nor his iner for any personal injury or property damage or a loss of any kind arising from or
the State or Province of <u>California</u> Waltham. Massachusetts have in <u>9/29/95</u> to <u>1</u> has performed examinations and ta requirements of the ASME Code, S By signing this certificate, neither the examinations and corrective measures employer shall be liable in any mar connected with this inspection.	a, and employed by <u>Arkwright Mutual Insurance Company</u> of hspected the components described in this Owner's Report during the period <u>10/9(c</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the Section XI. the Inspector nor his employer makes any warranty, expressed or implied, concerning the res described in this Owner's Report. Furthermore, neither the Inspector nor his inner for any personal injury or property damage or a loss of any kind arising from or
the State or Province of <u>California</u> Waltham. Massachusetts have in <u>9/29/95</u> to <u>1</u> has performed examinations and ta requirements of the ASME Code, S By signing this certificate, neither the examinations and corrective measu employer shall be liable in any mar connected with this inspection.	a, and employed by <u>Arkwright Mutual Insurance Company</u> of hspected the components described in this Owner's Report during the period <u>MOPG</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the Section XI. the Inspector nor his employer makes any warranty, expressed or implied, concerning the res described in this Owner's Report. Furthermore, neither the Inspector nor his inner for any personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1862</u> <u>California</u>
the State or Province of <u>California</u> Waltham. Massachusetts have in <u>9/29/95</u> to <u>1</u> has performed examinations and ta requirements of the ASME Code, S By signing this certificate, neither the examinations and corrective measu employer shall be liable in any mar connected with this inspection.	a, and employed by <u>Arkwright Mutual Insurance Company</u> of hspected the components described in this Owner's Report during the period <u>MOPG</u> , and state that to the best of my knowledge and belief, the Owner ken corrective measures described in this Owner's Report in accordance with the Section XI. the Inspector nor his employer makes any warranty, expressed or implied, concerning the res described in this Owner's Report. Furthermore, neither the Inspector nor his inner for any personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1862</u> <u>California</u>

As Required by the Provisions of the ASME Code SectionXI

- Southern California Edison Company 1. Owner: Unit: 2 2244 Walnut Grove Avenue MO: 95100597000 Rosemead, California 91770 Rspec: ASME SECTION XI DATA-0142 P&ID: 40141C (F6) 2. Plant: San Onofre Nuclear Generating Station N-5: S2-1301-2 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 Identification of System: Main Steam 4
- 5. (a) Applicable Construction Code: ASME Section III, Class 2, 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
8"x 48" 900# Drag Valve	CCI	18447-3-2	N/A	2HV8421	1979		Yes
Valve Plug	CCI	S/N 1, Ht.# 8080095	N/A	RSO-2157-90, SA182, Gr.F11	1990	Replacement	Yes

#### 7. Description of Work:

The valve was disassembled for inspection due to observed leakage. The valve was reassembled after replacing the valve plug.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100998-5 Pressure: NOP

Temp: N/A



NOTE Supplemental sheets in the form of lists, skitches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in literns 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.

Coperative mendation and a set of the set of
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this of the ASME Code, Section XI.
Type Code Symbol Stamp: N/A
Certificate of Authorization No: N/A Expiration Date: N/A
Signed: <u>Multille</u> Supervising ASME Codes Engineer Date: <u>6/8/97</u> 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 <u>California</u> , and employed by <u>Arkwright Mutual Insurance Company</u> of <u>Waltham, Massachusetts</u> have inspected the components described in this Owner's Report during the period <u>O7/18/966</u> to <u>O6/09/97</u> , 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
By signing this certificate, hence the hispector nor his chiptoyer's Report. Furthermore, neither the Inspector nor his 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

1862 Commissions \_

1862 California National Board, State, Province, and Endorsements

Date June 9 1997



- 1. Owner: Southern California Edison Company Unit: 2 2244 Walnut Grove Avenue MO: 95100598001 Rosemead, California 91770 Rspec: EREF-0385 P&ID: 40123B E-6 2. Plant: San Onofre Nuclear Generating Station N-5: S2-1208-14, S2-1208-11 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A Expiration Date: N/A 4. Identification of System Chemical and Volume Control
  - 5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S '74 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	Maoufacturer Serial No.	National Board No.	Other Identification	Year Built	Replaced or 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

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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.

 Remarks Replacement Control Valve Spindle certified to ASME III, Class 2, 1974 Edition, Summer 1974 Addenda. (Ref. reconcilation RSO 0509-93 Rev. 1).
 (Applicable Manufacturer's Data Reports are available on-aitc)

	ERTIFICATE OF COMPLIANCE
We certify that the statements made in the report of the ASME Code, Section XI.	rt are correct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed <u>Al Maille</u> Super- Owner or Owner's Designee, Title	vising ASME Codes Engineer Date: 7/18/96
CE	RTIFICATE OF INSPECTION
the State or Province of <u>California</u> , and emplo Waltham, <u>Massachusetts</u> have inspected the	components described in this Owner's Report during the period
Waltham, Massachusetts have inspected the <u>10/12/95</u> to <u>7/19/92</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspecto examinations and corrective measures describ- employer shall be liable in any manner for any	components described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner ive measures described in this Owner's Report in accordance with the or nor his employer makes any warranty, expressed or implied, concerning t ed in this Owner's Report. Furthermore, neither the Inspector nor his personal injury or property damage or a loss of any kind arising from or
Waltham, Massachusetts have inspected the ////2/95 to 7/19/92 has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspecto examinations and corrective measures describ	, and state that to the best of my knowledge and belief, the Owner ive measures described in this Owner's Report in accordance with the or nor his employer makes any warranty, expressed or implied, concerning t ed in this Owner's Report. Furthermore, neither the Inspector nor his personal injury or property damage or a loss of any kind arising from or
Waltham, Massachusetts have inspected the //2/95 to 7/19/92 has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspecto examinations and corrective measures describ- employer shall be liable in any manner for any	, and state that to the best of my knowledge and belief, the Owner ive measures described in this Owner's Report in accordance with the or nor his employer makes any warranty, expressed or implied, concerning t ed in this Owner's Report. Furthermore, neither the Inspector nor his

		As Required by the Provisions of the ASM.	E Code Section XI	
1.	Owner:Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770Plant:San Onofre Nuclear Generating Station San Clemente, California 92674-0128		Unit: 2 MO: 95111191000 Rspec: 021-96	
2.			P&ID: 40123B (E5) N-5: S2-1208-4	
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4.	Identification of System: Chemical and Volume Control		Expiration Date: N/A	

5. (a) Applicable Construction Code: ASME Section III. Class 2, 19974 Edition, Summer 1974 Addenda; Code Cases: None

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

- (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
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 \$ 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's designee and the AIA.

9. Remarks : None.

	CERTIFICATE OF COMPLIANCE
We certify that the statemer of the ASME Code, Section	nts made in the report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp:	N/A.
Certificate of Authorization	
Signed: Owner or Owner's	Designee, Title Designeer Date: 8/22/96
	CERTIFICATE OF INSPECTION
Waltham, Massachusetts	lifornia, and employed by <u>Arkwright Mutual Insurance Company</u> of have inspected the components described in this Owner's Report during the period by <u>8/23/96</u> , and state that to the best of my knowledge and belief, the Owner
has performed examination	s and taken corrective measures described in this Owner's Report in accordance with the
has performed examination requirements of the ASME By signing this certificate, r examinations and corrective	s and taken corrective measures described in this Owner's Report in accordance with the Code, Section XI. neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the e measures described in this Owner's Report. Furthermore, neither the Inspector nor his any manner for any personal injury or property damage or a loss of any kind arising from or



- 1. Owner: Southern California Edison Company Unit: 2 2244 Walnut Grove Avenue MO: 95111628000 Rosemead, California 91770 Rspec: 219-95 P&ID: 40123A E-2 2. Plant: San Onofre Nuclear Generating Station N-5: S3-1208-5 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A Expiration Date: N/A 4. Identification of System Chemical and Volume Control
  - 5. (a) Applicable Construction Code. ASME Section III. Class 2, 1974 Edition, S.75 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
3/8* 3-Valve Manifold	Gould Inc.	15153	N/A	2F70212	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 m., (2) information in liens 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 av		alara ya mwana a wa mwana ana ana ana ana ana ana ana ana ana
	CERTIFICATE OF COMPL	LANCE	
We certify if at the statements made in the of the ASME Code, Section XI.	and a second s	lacement conform ir or replacement	ms to the rules
Type Code Carabol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Date: 1	N/A	
Signed: <u>Ortherskill</u> S Owner or Owner's Designee, Titl	Supervising ASME Codes Engine	er Date:	6/12/96
Owner or Owner's Designee, Hu	C		
	CERTIFICATE OF INSPECT	ION	
the State or Province of <u>California</u> and the Waltham, Massachusetts have inspected 12/6/95 to 6/14	ession issued by the National Boar employed by <u>Arkwright Mutua</u> of the components described in the Mathematical mathematical state that to the	is Owner's Report ne pest of my know	<u>pany</u> of t during the period wledge and belief, the Owner
the State or Province of <u>California</u> and <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>12/6/95</u> to <u>6/14</u> has performed examinations and taken of requirements of the ASME Code, Section By signing this certificate, neither the Inspected examinations and corrective measures de employer shall be liable in any manner for	ession issued by the National Boar employed by <u>Arkwright Mutua</u> of the components described in the <u>Manual</u> , and state that to the exercise measures described in the AXI. pector nor his employer makes a scribed in this Owner's Report. In any personal injury or property	I Insurance Com his Owner's Repor he best of my know his Owner's Repor by warranty, expre Furthermore, neith damage or a loss	<u>pany</u> of t during the period wledge and belief, the Owner t in accordance with the essed or implied, concerning the per the Inspector nor his
I, the undersigned holding a valid commit the State or Province of <u>California</u> and <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>12/6/95</u> to <u>Coll44</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Insection examinations and corrective measures de employer shall be liable in any manner for connected with this inspection. <u>Manual Manual</u> Inspector's Signature	ession issued by the National Boar employed by <u>Arkwright Mutua</u> of the components described in the <u>Arkwright Mutua</u> and state that to the mrective measures described in the AI. pector nor his employer makes a scribed in this Owner's Report. If any personal injury or property Commissions <u>186</u>	I Insurance Com his Owner's Repor he best of my know his Owner's Repor hy warranty, expre Furthermore, neith damage or a loss	<u>pany</u> of t during the period wledge and belief, the Owner t in accordance with the essed or implied, concerning the per the Inspector nor his

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As Required by the Provisions of the ASME Code SectionXC

1	. Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec	2 95120527000 EREF-0013	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: N-5	40124B (E-2) S2-1208-5	
3	Work P	erformed by: Southern California Edison Company		ode Symbol Sta ization No:	mp: N/A N/A
4	Identifi	cation of System: Chemical and Volume Control		ion Date:	N/A

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

(Applacable 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 Date: 8/22/96 Signed: 16 - Supervising ASME Codes Engineer Owner of 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  $\frac{2/2}{96}$  to  $\frac{23/46}{23/46}$ , 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. alignson Commissions 1862 California Inspector's Signature National Board, State, Province, and Endorsements Date August 23/996

As Required by the Provisions of the ASME Code SectionXI

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

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

6. Identification of Components F.epaired or Replaced and Replacement Components:

Name of Component	N ame Of 1 ianufacturer	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: <u>System Leakage Pressure Test</u> See: AR 961100993-14 Pressure: NOP

Temp: N/A



NOTE: Supplemental sheets in the form of lists, sketche: 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's designee and the ALA.

9. Remarks : None.

CERTIFICATE OF C	OMPLIANCE
CERTIFICATE OF C	
We certify that the statements made in the report are correct and this f the ASME Code, Section XI.	replacement conforms to the rules
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration I Signed:	12/22
Owner or Owner's Designee, Title	
CERTIFICATE OF IN	ISPECTION
has performed examinations and taken corrective measures described requirements of the ASME Code, Section XI.	that to the best of my knowledge and belief, the Owner bed in this Owner's Report in accordance with the
By signing this certificate, neither the Inspector nor his employer r examinations and corrective measures described in this Owner's F eruployer shall be liable in any manner for any personal injury or p connected with this inspection.	Report. Furthermore, neither the Inspector nor his
AGUI	1862 California
Commissions	Camornia
Commissions Commissions	Nati Board, State, Province, and Endorsements
Inspector's Signature Commissions Date Jacob 9, 1997	Nat Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: 2 MO: 96030120000	MO:	0172
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	Rspec: ASME SECTION XI DATA-0173 P&ID: 40111B (G5) N-5: S2-1201-2	P&ID:	5175
3.	Work P	orformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A		
4	Identifi	cation of System: Reactor Coolant	Expiration Date: N/A	Expirat	

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition No Addenda (Valve); Class 1, 1974 Edition 1974 Addenda (Flange bolting); 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"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

See: AR 961100993-14

Pressure: NOP

Temp: N/A

NOTE Structure and the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (2) information in litems 1 through 6 on this report is included on each sheet, 3, much 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 Menufacturer's Data Reports are available on-aste)
anangan ng manang mangang kanang ng mangang n Tang ng mangang ng manga	CERTIFICATE OF COMPLIANCE
We certify that the statements made of the ASME Code, Section XI.	e in the report are correct and this replacement conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	방향 방법 것 같은 것 같은 것 같은 것이 같은 것 같은 것 같이 없다.
Signed: <u>Owner or Owner's Design</u>	Supervising ASME Codes Engineer Date: 6/7/97
	CERTIFICATE OF INSPECTION
12/11/9/0 to a	nspected the components described in this Owner's Report during the period <u>Ve/09/97</u> , and state that to the best of my knowledge and belief, the Owner aken corrective measures described in this Owner's Report in accordance with the Section XI.
examinations and corrective meas	the Inspector nor his employer makes any warranty, expressed or implied, concerning the sures described in this Owner's Report. Furthermore, neither the Inspector nor his anner for any personal injury or property damage or a loss of any kind arising from or
examinations and corrective meas employer shall be liable in any ma	sures described in this Owner's Report. Furthermore, neither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

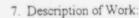
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosernead, California 91770	Unit: 2 MO: 96030150000 Rspec: ASME SECTION XI D	ATA-0187
2.	Plant:	San Onofre Nuclear Generating Station San Clemente California 92674-0128	P&ID: 40141D (G6) N-5: S2-1301-1	
3	Work Pe	erformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4	Identifi	cation of System: Main Steam	Expiration Date: N/A	

5. (a) Applicable Construction Code: ASME Section III, Class 2, 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	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 Stewn 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 Ht # 65162, Ht. Products Code Z2N	N/A	RSO-1421-95, SA194 Gr. 7 (CR- 2001-93), SEE-92- 0065	N/A	Replacement	No		



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

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100998-1 Pressure: NOP

Temp: N/A



NOTE

Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (i) size is 8 1/2 in x 11 in., (2) information in hems 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's designee and the AIA.

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 Supervising ASME Codes Engineer Date: 6/5/97 Signed: Owner or Owner's Designee, Title CERTIF'CATE 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 <u>OBJO2/96</u> to <u>Ola/OA/97</u>, 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 Commissions / California National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code Section XI

- Unit: 2 Southern California Edison Company 1. Owner: 96030193001 96030193000 MO: 2244 Walnut Grove Avenue Rosemead, California 91770 Rspec: ASME SECTION XI DATA-0193 P&ID: 40141D (F5) San Onofre Nuclear Generating Station 2. Plant S2-1310-1 N-5: San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A. 3. Work Performed by: Southern California Edison Company Authorization No: N/A N/A Expiration Date: Identification of System: Main Steam 4.
  - 5. (a) Applicable Construction Code: ASME Section III. 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	Replaced or Replacement	ASME Code Stamped Yes/No Yes
6" x 10" Safety Relief Valve	Crosby	N58737-00-0034	N/A	2PSV8409	1977	Replaced	
6" x 10" Safety Relief Valve	Crosby	N58737-01-0011	N/A	2PSV8409	1976	Replacement	Yes
1-3/8"D x 8 Heavy Hex Nut (12)	Nova Machine Ht. Code Z2N Products	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 the inlet nuts were also replaced. The removed valve was placed into the rebuild program.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100998-1 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 m. (2) information in Herris 1 through 6 on this report is included on each sheet, 3) each sheet is numbered and the num set 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.

20

 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 Drate: 5/13/97 Supervising ASME Codes Engineer Signed: 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 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 inspegtion. Commussions \_ 1862 aman California N Inspector's Signature National Board, State, Province, and Endorsements Date Man 14, 1997

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: 2 MO: 96030199000 Rspec: ASME SECTION XI DATA-01	85
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: 40141C (G7) N-5: S2-1301-2	
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4.	Identifie	cation of System: Main Steam	Expiration Date: N/A	

5. (a) Applicable Construction Code: ASME Section III, 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. N58737-00-0019	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		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 .4rswings may be used provided (1) size is 8 1/2 m. x 1) m., (2) information in .tems 1 through 6 on this report is included on each sheet. 3) each sheet is numbered and the number of sheets x :ecorded 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 : SEE No. 92-0065 allows for the replacement of Gr. 2H with Gr. 7.

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

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this of the ASME Code, Section XI.
Type Code Symbol Stamp: N/A
Certificate of Authorization No: N/A Expiration Date: N/A
Signed:
CERTIFICATE OF INSPECTION
the State or Province of <u>California</u> , and employed by <u>Arkwright Mutual Insurance Company</u> of
Waltham, Massachusetts have inspected the components described in this Owner's Report during the period <u>07/30/96</u> to <u>0/2/97</u> , 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 th 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.
Waltham, Massachusetts have inspected the components described in this Owner's Report during the period         07/30/96       to       0/2/97       , 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.         03/10/000000000000000000000000000000000
Waltham. Massachusetts have inspected the components described in this Owner's Report during the period <u>07/30/96</u> to <u>0/21/97</u> , 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 th 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.

As Required by the Provisions of the ASME Code Section XI

- Unit: 2 Southern California Edison Company 1. Owner: 2244 Walnut Grove Avenue MO: 96030210000 Rosemead, California 91770 Rspec: ASME SECTION XI DATA-0187 P&ID: 40141C (G6) San Onofre Nuclear Generating Station 2. Plant: N-5: S2-1301-2 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A Expiration Date: N/A Identification of System Main Steam 4.
  - 5. (a) Applicable Construction Code: ASME Section III, 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	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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in liems 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 installed and dated by the Owner or Owner's designee and the ALA.

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

(Appheable Manufacturer's Data Reports are available on-ane)

this <u>replacement</u> conforms to the rules repair or replacement
n Date: N/A
des Engineer Date: 1/20/97
INSPECTION
ht Mutual Insurance Company of cribed in this Owner's Report during the period the that to the best of me knowledge and belief, the Owner cribed in this Owner and in accordance with the er makes any warranty, expressed or implied, concerning the s Report. Furthermore, neither the Inspector nor his or property damage or a loss of any kind arising from or
<u>1862</u> National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code SectionXC

- Southern California Edison Company Unit: 2 1. Owner: 2244 Walnut Grove Avenue MO: 96030229000 Rosemead, California 91770 Rspec: ASME SECTION XI DATA-0192 P&ID: 40141C (G3) San Onofre Nuclear Generating Station 2. Plant: N-5: S2-1301-2 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A N/A Expiration Date: Identification of System: Main Steam 4.
  - 5. (a) Applicable Construction Code: ASME Section III, 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	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	



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 liters 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.

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

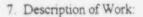
(Applecable Manufacturer's Dec	a Reports are evaluable on-este)
CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct and of the ASME Code, Section XI.	this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Signed: Supervising ASME Cod Owner or Owner's Designee, Title	n Date: N/A les Engineer Date: 1/20/97
CERTIFICATE OF	INSPECTION
I, the undersigned holding a valid commission issued by the Nati the State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> <u>Waltham, Massachusetts</u> have inspected the components descr <u>07/30/96</u> to <u>01/21/97</u> , and state has performed examinations and taken corrective measures descr requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer	It Mutual Insurance Company of ribed in this Owner's Report during the period e that to the best of my knowledge and belief, the Owner ribed in this Owner's Report in accordance with the
examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or connected with this inspection.	Report. Furthermore, neither the Inspector nor his
Collhompon Commissions	
Date Al, 1997	National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code SectionXI

- Unit: 2 Southern California Edison Company 1. Owner: 2244 Walnut Grove Avenue MO 96030233000 Rosemead, California 91770 Rspec: ASME SECTION XI DATA-0193 P&ID: 40141C (G3) 2. Plant: San Onofre Nuclear Generating Station N-5: S2-1301-2 San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company Authorization No: N/A Expiration Date: N/A Identification of System: Main Steam 4
  - 5. (a) Applicable Construction Code: ASME Section III, 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 Cc.nponent	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	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



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

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

CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct and of the ASME Code, Section XI.	this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration	n Date: N/A
Signed: <u>Germanian Supervising ASME Con</u> Owner or Owner's Designee, Title	des Engineer Date: 1/20/97
CERTIFICATE OF	INSPECTION
Waltham. Massachusetts have inspected the components desc 07/30/96 to $01/21/97$ , and state has performed examinations and taken corrective measures desc requirements of the ASME Code, Section XI.	te that to the best of my knowledge and belief, the Owner
By signing this certificate, neither the Inspector nor his employed examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury of connected with this inspection.	s Report. Furthermore, neither the Inspector nor his
Commissions Commissions	1862 California
Inspector's Signature	National Board, State, Province, and Endorsements
Date Jan, 21, 1997	

As Required by the Provisions of the ASME Code Section XI

1.	Owner: Plant:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 San Onofre Nuclear Generating Station San Clemente, California 92674-0128	MO: Rspec: P&ID:	2 96030964000 961 124-96, ASME X 40112B (G2) S2-1204-12	21941000 96121945000 I DATA-0033
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identifi	cation of System: Safety Injection and Shutdown Cooling	Expiration Date: N/A		N/A

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, Nr. 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
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: <u>System Functional Pressure Test</u> See: AR 961100995-1 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 liens 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 designet and the AIA.

9. Remarks : None.

	(Application Manufacturer's Data Report	to and avaluated on-site)		1000 BF ALL 100
	CERTIFICATE OF CO	MPLIANCE		
We certify that the statements made in the re of the ASME Code, Section XI.	eport are correct and this	repair and rep repair or replacement	acement conforms to the rules	
ype Code Symbol Stamp: N/A				
Signed:Superior Owner's Designee, Title	Expiration Da		6/2/97	
	CERTIFICATE OF INS	PECTION		-
l, the undersigned holding a valid commissi the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected	ployed by <u>Arkwright M</u> the components describe	d in this Owner's I	Company of Report during the period	
the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected	the components describe 97, and state the ective measures describe	lutual Insurance d in this Owner's I at to the best of my	<u>Company</u> of Report during the period knowledge and belief, the Ow	
he State or Province of <u>California</u> , and em <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>10115796</u> to <u>Dia 09</u> has performed examinations and taken corr requirements of the ASME Code, Section 3 By signing this certificate, neither the Inspe examinations and corrective measures desc employer shall be liable in any manner for	aployed by <u>Arkwright M</u> the components describe <u>97</u> , and state the ective measures describe KI. ector nor his employer ma cribed in this Owner's Rep	d in this Owner's I at to the best of my d in this Owner's I thes any warranty, port. Furthermore	<u>Company</u> of Report during the period knowledge and belief, the Ow Report in accordance with the expressed or implied, concernin , neither the Inspector nor his	ner ng the
the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected <u>1015966666666666666666666666666666666666</u>	aployed by <u>Arkwright M</u> the components describe <u>97</u> , and state the ective measures describe KI. ector nor his employer ma cribed in this Owner's Rep	d in this Owner's I at to the best of my d in this Owner's I d in this Owner's I ukes any warranty, port. Furthermore operty damage or a	<u>Company</u> of Report during the period knowledge and belief, the Ow Report in accordance with the expressed or implied, concernin , neither the Inspector nor his	ner ng the
he State or Province of <u>California</u> , and em <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>10115796</u> to <u>Dia 09</u> has performed examinations and taken corr requirements of the ASME Code, Section 3 By signing this certificate, neither the Inspe examinations and corrective measures desc employer shall be liable in any manner for	poloyed by <u>Arkwright M</u> the components describe <u>97</u> , and state the ective measures describe [1]. ector nor his employer ma cribed in this Owner's Rep any personal injury or pro 	d in this Owner's I at to the best of my d in this Owner's I when any warranty, port. Furthermore operty damage or a	<u>Company</u> of Report during the period knowledge and belief, the Ow Report in accordance with the expressed or implied, concerning neither the Inspector nor his loss of any kind arising from of	ner ng the

		2244 Walnut Grove AvenueMO:96031222000Rosemead, California 91770FCN:F12124M, F12127M, F12128MSan Onofre Nuclear Generating StationRspec:ASME SECTION XI DATA-0175San Clemente, California 92674-0128P&ID:40111DN-5:S2-1201-3-7N-5:S2-1201-3-7			
1.	Owner:	2244 Walnut Grove Avenue	Unit: MO: FCN:	F12124M, F1212	
2.	Plant:		P&ID:	40111D	IXIDAIA-017:
3.	Work Pe	rformed by: Southern California Edison Company	Author	ization No:	N/A
4.	Identifica	ation of System: Reactor Coolant	Expira	tion 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.

 Tests Conducted: <u>System Leakage Pressure Test</u> 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 m. x.11 m., (2) information in lterns 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.

 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 Date: 6/12/97 Supervising ASME Codes Engineer Signed: Owner or Owner's Designee, Title CERTIFICATE OF INSPECTION I, the undersigned holding a valid commission issued by the National Board of Boiler and Fressure 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 , 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 Commissions / Blo2 California National Board, State, Province, and Endorsements tal 12, 1997 Date

1.	Owner: Plant:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 San Onofre Nuclear Generating Station	Sheet 1 of 1 Unit: 2 MO: 96031224000 FCN: F12124M, F12126M, F12128M Rspec: ASME SECTION XI DATA-0175 P&ID: 40111D
		San Clemente, California 92674-0128	N-5: \$2-1201-3-7
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A
4.	Identific	ation of System: Reactor Coolant	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 Manufactur <del>er</del>	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	74/5797/002	N/A	2PV0100B	1978		Yes
Upper Bonnet Bellows Assembly	Hammel-Dahl Conoflow	84/10900/002	N/A	RSO-8257-84	1984	Replaced	Yes
Upper Bonnet Bellows Assembly	Anchor/Darling	ET455-1-3	N/A	RSO-1473-96 & RSO-3387-93	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

7. Description of Work:

The upper bonnet bellows assembly (including the valve plug and upper bonnet studs) was replaced on the valve in plant position 2PV0100B. Reference: FCN F12124M, F12126M and F12128M.

8. Tests Conducted: System Leakage Pressure Test See: AR 961100993-18

Pres: NOP

Temp: N/A

NOTE

Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is \$ 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.

 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.

(Appacable Manufacturer's Data Reports are available on-arte) 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 Date: 6/12/97 Signed: alla Sepervising ASME Codes Engineer es. Owner or Owner's Designee, Title CERTIFICATE OF INSPECTION L 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, to , 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 jaspection. Inspector's Signature Commissions California National Board, State, Province, and Endorsements Ene 12, 1997 Dates

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

As Required by the Provisions of the ASME Code SectionXI

1.	Owner: Plant:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 San Onofre Nuclear Generating Station	Unit: 2 MO: 96031765000 Rspec: ASME SECTION XI DATA-020 P&ID: 40112D N-5: \$2-1201-4	0207
		San Clemente, California 92674-0128		
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4.	Identifie	cation of System: Safety Injection and Shutdown Cooling	Expiration Date: N/A	

5. (a) Applicable Construction Code: ASME Section III. Class 2, 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
6" x 8" Relief Valve	Crosby Valve & Gage	N50061-00-0003	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: <u>System Functional Pressure Test</u> See: AR 961100993-11 Pressure: NOP

Temp: N/A



NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 m. (2) information in literis 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 inutialed and dated by the Owner's designee and the ALA.

Ve certify that the statements made in the re f the ASME Code, Section XI.	CERTIFICATE OF C		an a transmission and a state and a state and a state of the
	WARKEN ANT STATE OF S	OMPLIANCE	1.19(共和語の)
tine ASME Code, Section A.	eport are correct and thi	s <u>replacement</u> cor repair or replacement	forms to the rules
ype Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration D	ate: N/A	1,
Signed: <u>Multiclus</u> Owner or Owner's Designee, Title	pervising ASME Codes	Engineer Date:	5/13/97
	CERTIFICATE OF IN	SPECTION	
he State or Province of <u>California</u> , and em Waltham, Massachusetts have inspected 12/03/96 to 05/14/ has performed examinations and taken corr requirements of the ASME Code, Section 3	the components describ <u>97</u> , and state the ctive measures describ	ed in this Owner's Re hat to the best of my l	port during the period cnowledge and belief, the Owner
By signing this certificate, neither the Inspe- examinations and corrective measures desc employer shall be liable in any manner for connected with this inspection.	ribed in this Owner's Re	eport. Furthermore, 1	neither the Inspector nor his
ounected with this hispection.			
Inspector's Signature	Commissions	1862	California Province, and Endorsements

## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENT?

As Required by the Provisions of the ASME Code Section.X

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 96032350000 GEN-106, R2		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40111A S2-1201-3		
3.	3. Work Performed by: Southern California Edison Company			ode Symbol Stamp: ization No:	N/A N/A	
4	Identifi	cation of System: Reactor Coolant	Expirat	tion Date:	N/A	

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-0559	N/A	S21201MP002	1978	***	Yes
Mechanical Seal Cartridge	Bingham- Willamette	1714880-7	1167	SO23-CART-#17	1986	Replaced	Yes
Mechanical Seal Cartridge	Bingham- Willamette	1714880-5	1165	RSO-2779-86, SO23-CART-#15	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: <u>System Leakage Pressure Test</u> See: AR 961100993-5 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 liters 1 through 5 on this report is included on each sheet, 3) each shiert 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.

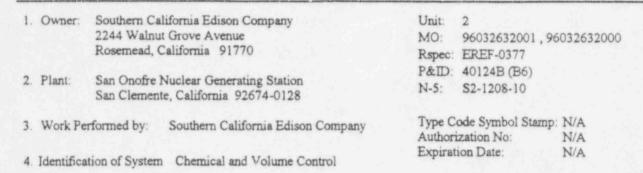


9. Remarks : None.

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	CERTIFICATE OF	COMPLIANCE	
Ve certify that the statements f the ASME Code, Section 3	made in the report are correct and KI.	this <u>replacement</u> or replacement	conforms to the rules mt
ype Code Symbol Stamp:	N/A		
ertificate of Authorization N	Io: N/A Expiration	Date: N/A	
igned: <u>Allfiil</u> Owner or Owner's D	Supervising ASME Cod esignee, Title	les Engineer Dat	e5/13/27
	CERTIFICATE OF	INSPECTION	
			y knowledge and belief, the Owner
as performed examinations equirements of the ASME C By signing this certificate, ne xaminations and corrective mployer shall be liable in ar connected with this inspectio	and taken corrective measures desc lode, Section XI. wither the Inspector nor his employer measures described in this Owner's my manner for any personal injury or m.	ribed in this Owner's r makes any warranty Report. Furthermore r property damage or	Report in accordance with the expressed or implied, concerning the e, neither the Inspector nor his a loss of any kind arising from or
has performed examinations equirements of the ASME C By signing this certificate, ne examinations and corrective	and taken corrective measures desc lode, Section XI. wither the Inspector nor his employer measures described in this Owner's my manner for any personal injury or m.	ribed in this Owner's r makes any warranty. Report. Furthermore r property damage or 1862	Report in accordance with the expressed or implied, concerning the e, neither the Inspector nor his

2

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI



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

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

Name of Component	Name" Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Replaced or Replacement	ASME Code Stamped Yes/No
Inlet Accumulator/Suction Stabilizer	Greer Hydraulics, Inc.	2984	N/A	S21208MW248	1978	an an se	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

20



2

NOTE Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 m., (2) information in items 1 through 6 or ins inport 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.

	CERTIFICATE OF	COMPLIANCE	na na ana amin'ny fanisana amin'ny fanisana amin'ny fanisana amin'ny fanisana amin'ny fanisana amin'ny fanisana
We certify that the statements made in the r of the ASME Code, Section XI.	eport are correct and t	this <u>replacement</u> repair or replacem	conforms to the rules
Type Code Symbol St. mp: N/A			
Certificate of Authorization No: N/A	Expiration	Date: N/A	
Signed: <u>Milling</u> Sur Owner or Owner's Designee, Title	pervising ASME Cod	<u>es Engineer</u> Da	6/18/9G
	CERTIFICATE OF I	NSPECTION	
has performed examinations and taken corr equirements of the ASME Code, Section 3 By signing this certificate, neither the Inspe examinations and corrective measures desc employer shall be liable in any manner for a connected with this inspection.	KI. ector nor his er ployer ribed in this Owner's any personal injury or	makes any warranty Report. Furthermore property damage or	expressed or implied, concerning the
MIL		18/201	California
Inspector's Signature	Commissions _		te, Province, and Endorsements

### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	an a		Sheet 1 of 1	a a supermitta and a a doc must all a sup, le via difficanti, for a difficient de la supermitta and a supermit	INVESTIGATION OF THE
1	Owner:	Southern California Edison Company	Unit:	2	
1		2244 Walnut Grove Avenue	MO:	96033361000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
2.	Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128		P&ID:	40111A	
		San Clemente, California 92674-0128	N-5:	S2-1201-3	
3	Work Pe	rformed by: Southern California Edison Company			
2.			Type C	Code Symbol Stamp: N/A	
				rization No: N/A	
4	Identific	cation of System: Reactor Coolant	Expira	tion Date: N/A	

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 Snutber PSA 1-4	Par_ic 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, aketches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m., (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.

	(Applicable Manufact wer's Data	Reports are available on-asse)	an a presidente d'acteur de l'acteur de la construction de la construction de la paper en acteur acteur de la c
	CERTIFICATE OF	COMPLIANCE	
Ve certify that the statements made in the re- f the ASME Code, Section XI.	port are correct and t	his <u>deletion</u> conf repair or replacen	
ype Code Symbol Stamp: N/A			
ertificate of Authorization No: N/A	Expiration	Date: N/A	
igned: <u>Altheille</u> Sup Owner or Owner's Designee, Title	ervising ASME Code	es Engineer Da	ate: 1/9/97
			ner ansammanisme andar mit anterantes and and to other stilling and an anter a star and
	CERTIFICATE OF I	NSPECTION	
as performed examinations and taken corre equirements of the ASME Code, Section X by signing this certificate, neither the Inspec xaminations and corrective measures descr mployer shall be liable in any manner for a connected with this inspection.	ctive measures descr I. ctor nor his employer ibed in this Owner's i	makes any warrant Report. Furthermore	y, expressed or implied, concerning the
Inspector's Signature	Commissions		California
Date Aun. 10, 1997		National Board, Si	tate, Province, and Endorsements
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	over the second second second second		Sheet 1 of 1
1.	Owner:	Southern California Edison Company	Unit: 2
		2244 Walnut Grove Avenue	MO: 96033362000
		Rosemead, California 91770	DCP: 2-6683.05SP
			Rspec: 015-96
2.	Plant:		P&D: 40111B
		San Clemente, California 92674-0128	N-5: S2-1201-3
3.	Work Pe	erformed by: Southern California Edison Com	lpany
			Type Code Symbol Stamp: N/A
			Authorization No: N/A
4	Identifie	cation of System: Reactor Coolant	Expiration Date: N/A

FORM NIS 2 OWNER'S DEPORT FOR DEPATRS OR REPLACEMENTS

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



NCTE: Supplemental sheets in the form of ans, aketches, or drawings may be used provided (1) size is 8 i/2 m × 11 m, (2) information in liems 1 through 6 on this report is included on each sheet, 3) each sheet is numbered and the number of sheets in 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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the re f the ASME Code, Section XI.	port are correct and this deletion conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed:	pervising ASME Codes Engineer Date: 1/9/47
	CERTIFICATE OF INSPECTION
he State or Province of California, and em	on issued by the National Board of Boiler and Pressure Vessel Inspectors and ployed by <u>Arkwright Mutual Insurance Company</u> of
he State or Province of <u>California</u> , and em <u>Waltham</u> , <u>Massachusetts</u> have inspected to <u>1/1/8/9/0</u> to <u>0/1/0/9</u> has performed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspec- examinations and corrective measures descri- employer shall be liable in any manner for a connected with this inspection.	ployed by Arkwright Mutual Insurance Company of the components described in this Owner's Report during the period 7, and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the Cl. ector nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his my personal injury or property damage or a loss of any kind arising from or
he State or Province of <u>California</u> , and em <u>Waltham</u> , <u>Massachusetts</u> have inspected to <u>1/1/8/9/6</u> to <u>0/1/0/9</u> has performed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspec- examinations and corrective measures descri- employer shall be liable in any manner for a	ployed by Arkwright Mutual Insurance Company of the components described in this Owner's Report during the period Z, and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the G. ctor nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his

	All and the second s		Sheet 1 of 1		
	Owner:	Southern California Edison Company	Unit:	2	
	U	2244 Walnut Grove Avenue	MO:	96033363000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112C	
		San Clemente, California 92674-0128	N-5:	S2-1204-32	
	Work Pe	erformed by: Southern California Edison Company			
			Type C	ode Symbol Stamp	
				ization No:	N/A
A	Identify	cation of System: Safety Injection and Shutdown Cooling	Expira	tion 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 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 lasts, 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 mutaled and dated by the Owner or Owner's designee and the AIA.



9. Remarks : None.

#### (Applicable Manufacturer's Dela 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

Date: 1/20/97

Signed:

#### Supervising ASME Codes Engineer 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

 $\frac{10/31/96}{10}$  to  $\frac{01/21/97}{10}$  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.

1862 California Commissions Hermy Inspector's Signature National Board, State, Province, and Endorsements Lan. 21. 1997 Date /

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Shere i of i Unit: MO: DCP:	2 96033368000 2-6683.05SP	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		015-96 40112D S2-1204-5	
3.	Work Pe	rformed by: Southern California Edison Company			
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Author	Code Symbol Stamp: rization No: ttion Date:	N/A N/A N/A

FORM NIS.2 OWNER'S DEPORT FOR DEPARTS OF DEPI ACEMENTS

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	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 lasts, akeriches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in Rems 1 through 6 on this report is included on each sheet, 3) each sheet is numbered and the number of absets 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.

	a Reports are available on-ease)
CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct and of the ASME Code, Section XI.	this <u>deletion</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Signed: <u>Supr. vising ASME Cod</u> Owner or Owner's Designee, Title	es Engineer Date: 1/20/97
has performed examinations and taken corrective measures descr	onal Board of Boiler and Pressure Vessel Inspectors and <u>t Mutual Insurance Company</u> of ribed in this Owner's Report during the period that to the best of my knowledge and ballef the Owner
equirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's	makes any warranty expressed or implied concerning the
imployer shall be hable 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	property damage or a loss of any kind arising from or

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	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96033369000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112C	
		San Clemente, California 92674-0128	N-5:	S2-1204-5	
1.	Work Pe	rformed by: Southern California Edison Company			
			Type C	Code Symbol Stamp	: N/A
			Author	rization No:	N/A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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	Replaced or 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

Supplemental sheets in the form of lists, aketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (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 mitialed and dated by the Owner or Owner's design ze and the ALA. NOTE

(Apphoable Menufacturer's Deta Roporta are svalable on-este)	(Berrins area)
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.	
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Date: N/A Signed: <u>Mula liel</u> Supervising ASME Codes Engineer Date: <u>1/20/9</u> 7 Owner or Owner's Designee, Title	
CERTIFICATE OF INSPECTION	
the State or Province of <u>California</u> and employed by <u>Arkwright Mutual Insurance Company</u> of <u>Waltham, Massachusetts</u> have inspected the components described in this Owner's Report during the period <u>////////////////////////////////////</u>	ar
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning 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.	; the
Commissions 1862 California	
Inspector's Signature National Board, State, Province, and Endorsements	
have a rear	
Date CHEM. 21, 1997	

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

As Keepined by the Provisions of the AShE Code SectionXI

			Shoet 1 of 1			
1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	96033371000		
		Rosemead, California 91770	DCP:	2-6683.05SP		
		See On the Manhard Companying Station	Rspec:	016-96		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID:	40113A		
		San Ciemente, Camornia 92074-0128	N-5:	S2-1204-5		
3.	Work Pe	rformed by: Southern California Edison Company				
			Type C	Code Symbol Stamp:	N/A	
			Author		N/A	
4	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A	

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 m. x 11 m., (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 mutaied 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 COMP	LIANCE	
We certify that the statements made in the f the ASME Code, Section XI.		placement conform pair or replacement	s to the rules
ype Code Symbol Stamp: N/A			
Sertificate of Authorization No: N/A	Expiration Date: Supervising ASME Codes Engin		1/9/97
Owner or Owner's Designee, Ti	CERTIFICATE OF INSPEC	CTION	
the undersigned holding a valid comm be State or Province of <u>California</u> and <u>Valtham</u> , <u>Massachusetts</u> have inspect <u>11/05/9</u> to <u>01/11</u> as performed examinations and taken equirements of the ASME Code, Section	d employed by <u>Arkwright Mutu</u> cted the components described in $\frac{n}{2}$ , and state that to corrective measures described in	this Owner's Report the best of my know	any of during the period ledge and belief, the Owner
By signing this certificate, neither the la minations and corrective measures mployer shall be liable in any manner	nspector nor his employer makes described in this Owner's Report	Furthermore, neithe	r the inspector nor his
connected with this inspection.		1 -	
connected with this inspection.	Commissions 18	62	California

		As Required by the Provisions of the ASHE Co	a second se	JA KEI LACI	EIVLEIR I S
			Sheet 1 of 1		A THE REAL PROPERTY AND ADDRESS OF
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96033372000	
		Rosemead, California 91770	DCY:	2-6683.05SP	
	Dian	Second Mala Cardina Stati	Rspec:	017.96	
4.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112D	
		San Clemente, California 92674-0128	N-5:	S2-1204-6	
3.	Work Pe	rformed by: Southern California Edison Company			
		김 그는 것이 가지 않는 것이 같이 많이 했다. 그는 것이 같이 많이 많이 많이 많이 많이 했다.	Type C	Code Symbol Stam	ip: N/A
			Author	rization No:	N/A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

FORM NIS. 2 OWNED'S REPORT FOR DEPAIDS OD DEDI ACEMENTS

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 Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pacific Scientific	7580	N/A	S2SI043H018A	1980	Replaced	No
Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3962RR1	N/A	Replacement	No
Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3562RR1	N/A	Replacement	No
Lisega	Ht. Code Z533	N/A	RSO-0882-96, SA479 Tp.410	N/A	Replacement	No
Pacific Scientific	17963	N/A	S2SI043H018B	1991	Replaced	No
Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3962RR1	N/A	Replacement	No
Lisega	S2-SI-043-H-018	N/A	RSO-0882-96, 3562RR1	N/A	Replacement	No
Lisega	Ht. Code Z533	N/A	RSO-0882-96, SA479 Tp.410	N/A	Replacement	No
	Manufacturer Pacific Scientific Lisega Lisega Pacific Scientific Lisega Lisega	ManufacturerSerial No.Pacific Scientific7580LisegaS2-SI-043-H-018LisegaS2-SI-043-H-018LisegaHt. Code Z.533Pacific Scientific17963LisegaS2-SI-043-H-018LisegaS2-SI-043-H-018LisegaS2-SI-043-H-018	ManufacturerSerial No.Board No.Pacific Scientific7580N/ALisegaS2-SI-043-H-018N/ALisegaS2-SI-043-H-018N/ALisegaHt. Code Z.533N/APacific Scientific17963N/ALisegaS2-SI-043-H-018N/ALisegaS2-SI-043-H-018N/A	ManufacturerSerial No.Board No.IdentificationPacific Scientific7580N/A\$2\$SI043H018ALisega\$2-\$SI-043-H-018N/AR\$O-0882-96, 3962RR1Lisega\$2-\$SI-043-H-018N/AR\$O-0882-96, 3562RR1LisegaHt. Code Z533N/AR\$O-0882-96, SA479 Tp.410Pacific Scientific17963N/A\$2\$SI043H018BLisega\$2-\$SI-043-H-018N/A\$2\$SI043H018BLisega\$2-\$SI-043-H-018N/A\$2\$SI043H018BLisega\$2-\$SI-043-H-018N/A\$2\$SI043H018BLisega\$2-\$SI-043-H-018N/A\$2\$O-0882-96, 3962RR1Lisega\$2-\$SI-043-H-018N/A\$2\$O-0882-96, 3562RR1Lisega\$2-\$SI-043-H-018N/A\$2\$O-0882-96, 3562RR1Lisega\$2-\$SI-043-H-018N/A\$2\$O-0882-96, 3562RR1LisegaHt. Code Z533N/A\$2\$O-0882-96, 3562RR1	Manufacturer         Serial No.         Board No.         Identification         Built           Pacific Scientific         7580         N/A         \$2\$SI043H018A         1980           Lisega         \$2\$-\$SI-043-H-018         N/A         \$\$S0-0882-96, 3962RR1         N/A           Lisega         \$\$2\$-\$SI-043-H-018         N/A         \$\$R\$S0-0882-96, 3562RR1         N/A           Lisega         \$\$2\$-\$SI-043-H-018         N/A         \$\$R\$S0-0882-96, 3562RR1         N/A           Lisega         Ht. Code Z533         N/A         \$\$S0-0882-96, \$\$A479 Tp.410         N/A           Pacific Scientific         17963         N/A         \$\$2\$SI043H018B         1991           Lisega         \$\$2\$-\$SI-043-H-018         N/A         \$\$2\$-\$082-96, 3562RR1         N/A           Lisega         Ht. Code Z533         N/A         \$\$2\$0-0882-96, 3562RR1         N/A	Name Of Manufacturer ManufacturerManufacturer Serial No.National Board No.Other IdentificationYear BuiltReplaced or ReplacementPacific Scientific7580N/A\$2\$I043H018A1980ReplacedLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3962RR1N/AReplacementLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3562RR1N/AReplacementLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3562RR1N/AReplacementLisegaHt. Code Z533N/ARSO-0882-96, \$A479 Tp.410N/AReplacementPacific Scientific17963N/A\$2\$I043H018B1991ReplacedLisega\$2-\$I-043-H-018N/A\$2\$I043H018B1991ReplacementLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3952Rk1N/AReplacementLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3952Rk1N/AReplacementLisegaHt. Code Z533N/ARSO-0882-96, 3562RR1N/AReplacementLisega\$2-\$I-043-H-018N/ARSO-0882-96, 3562RR1N/AReplacementLisegaHt. Code Z533N/ARSO-0882-96, 3562RR1N/AReplacementLisegaHt. Code Z533N/ARSO-0882-96, 3562RR1N/AReplacement

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/r

Pres: N/A

Temp: N/A



NOTE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m. (2) information in lights 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 flux form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.



F COMPLIANCE this <u>replacement</u> conforms to the rules repair or replacement n Date: N/A des Engineer Date: <u>1/20/97</u> INSPECTION
repair or replacement n Date: N/A des Engineer Date: 1/20/97-
des Engineer Date: 1/20/97
des Engineer Date: 1/20/97
INSPECTION
HOLDO HOL
aribed in this Owner's Report in accordance with the ar makes any warranty, expressed or implied, concerning the s Report. Furthermore, neither the Inspector nor his ar property damage or a loss of any kind arising from or
1863 California
National Board, State, Province, and Endorsements
10 10

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section X

			Contract of the second s	the second se	and the state of t	
all second	and the second		Sheet 1 of 1			1
1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	96033373000		
		Rosemead, California 91770	DCP:	2-6683.05SP		
			Rspec:	016-96		
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A		
		San Clemente, California 92674-0128	N-5:	S2-1204-5		
3.	Work Pe	rformed by: Southern California Edison Company				
				Code Symbol Stamp: ization No:	N/A N/A	
4	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion 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 Buih	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-S1-059-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 m. x 1) m. (2) information in items 1 through 6 on this report is included on each sheet, 3) such sheet is numbered and the number of aheets is recorded at the top of this form, and (4) each aheet is suitaled and dated by the Owner or Owner's designee and the ALA.

C	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the repo of the ASME Code, Section XI.	ort are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Super</u> Owner of Owner's Designee, Title	vising ASME Codes Engineer Date: 1/9/97
, the undersigned holding a valid commission he State or Province of <u>California</u> , and empl Walthans, Massachusetts have inspected the	ERTIFICATE OF INSPECTION issued by the National Board of Boiler and Pressure Vessel Inspectors and oyed by <u>Arkwright Mutual Insurance Company</u> of components described in this Owner's Report during the period
the undersigned holding a valid commission the State or Province of <u>California</u> , and employ <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Massachusetts</u> have inspected the mass performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspecto examinations and corrective measures describ	issued by the National Board of Boiler and Pressure Vessel Inspectors and oyed by <u>Arkwright Mutual Insurance Company</u> of components described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner tive measures described in this Owner's Report in accordance with the
the undersigned holding a valid commission the State or Province of <u>California</u> , and employ <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>Waltham</u> , <u>Massachusetts</u> to <u>Opportunity</u> to <u>Opportunity</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspecto examinations and corrective measures describ employer shall be liable in any manner for any	issued by the National Board of Boiler and Pressure Vessel Inspectors and oyed by <u>Arkwright Mutual Insurance Company</u> of components described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner tive measures described in this Owner's Report in accordance with the or nor his employer makes any warranty, expressed or implied, concerning the bed in this Owner's Report. Furthermore, neither the Inspector nor his

## 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: 96033440000 Rspec: ASME SECTION XI DATA-0035
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: 40112A (E3) N-5: S2-1204-34
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A
4.	Identifi	cation of System: Safety Injection and Shutdown Cooling	Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III. Class2, 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
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 postion S21204MU016 was replaced.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100995-3

Pressure: NOP

Temp: N/A



NOTE. Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) suformation 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.

۰.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in t of the ASME Code, Section XL	he report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	why a autori state. 14/A
Signed: <u><u>Multill</u> Owner or Owner's Designee, Th</u>	Supervising ASME Codes Engineer Date: 6/7/97
	CERTIFICATE OF INSPECTION
I, the undersigned holding a valid comm	ussion issued by the National Board of Boiler and Deserve at
Waltham, Massachusetts have inspect 10/15/96 to 06/0 has performed examinations and taken o requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d	spector nor his employer makes any warranty, expressed or implied, concerning the escribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or
Waltham, Massachusetts have inspect 10115/96 to 06/0 has performed examinations and taken o requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d	ted the components described in this Owner's Report during the period and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the on XI. spector nor his employer makes any warranty, expressed or implied, concerning the

		As Required by the Provisions of the ASME Co	sde SectionXI Sheet 1.0[1		
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96033461000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
2	Diant	San On afra Muslaan Conserting Station	Rspec:	015-96	
6.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID:	40113A	
		San Ciemene, Camornia 92074-0120	N-5:	S2-1204-4	
3.	Work Pe	rformed by: Southern California Edison Company			
			Type C	ode Symbol Stamp:	N/A
			Author	ization No:	N/A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

(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 lasts, 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 designce and the ALA.

CERTIFICATE OF	COMPLIANCE
	COMPLIANCE
Ve certify that the statements made in the report are correct and to f the ASME Code, Section XI.	this <u>deletion</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
ertificate of Authorization No: N/A Expiration	Date: N/A
igned: <u>Supervising ASME Code</u> Owner or Owner's Designee, Title	les Engineer Date: 1/20/47
CERTIFICATE OF I	INSPECTION
A	
the undersigned holding a valid commission issued by the Natio	onal Board of Boiler and Pressure Vessel Inspectors and
he State or Province of California, and employed by Arkwright	t Mutual Insurance Company of
Valtham, Massachusetts have inspected the components descri	ribed in this Owner's Report during the period
1107/90 to 0/2/97 , and state	e that to the best of ny knowledge and belief, the Owner
as performed examinations and taken corrective measures descr	ribed in this Owner's Report in accordance with the
equirements of the ASME Code, Section XI.	
By signing this certificate, neither the Inspector nor his employer	makes any warranty, expressed or implied, concerning the
xaminations and corrective measures described in this Owner's l	Report. Furthermore, neither the Inspector nor his
employer shall be liable in any manner for any personal injury or connected with this inspection.	property damage or a loss of any kind arising from or
officied with his hispection.	
Commissions Commissions	18/2 California
Inspector's Signature	National Board, State, Province, and Endorsements
and a subsequent	Ivanonal Board, State, Flovince, and Endorsements
1	
Date 194 21, 1997	

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

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			Sheet 1 of 1		Contractor and an a little of the	
1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	96033475000		
		Rosemead, California 91770	DCP:	2-6683.05SP		
-	Diant	See One for Muslow Commission Station	Rspec:	015-96		
4.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A		
		San Clemente, California 92674-0128	N-5:	S2-1204-4		
3.	Work Pe	rformed by: Southern California Edison Company				
			Type C	Code Symbol Star	np: N/A	
				rization No:	N/A	
4	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion 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	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.

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 m. 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.

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CERTI	FICATE OF COMPLIANCE
We certify that the statements made in the report are of the ASME Code, Section XI.	correct and this <u>deletion</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed:	ASME Codes Engineer Date: 1/9/97
CERTIF	FICATE OF INSPECTION
the State or Province of California, and employed b	
the State or Province of <u>California</u> , and employed b Waltham, <u>Massachusetts</u> have inspected the comp <u>10/97</u> to <u>0/097</u> has performed examinations and taken corrective more requirements of the <i>I</i> .SME Code, Section XI. By signing this certificate, neither the Inspector nor examinations and corrective measures described in	
the State or Province of <u>California</u> , and employed b Waltham, <u>Massachusetts</u> have inspected the comp to <u>0/0/97</u> has performed examinations and taken corrective me requirements of the <i>I</i> .SME Code, Section XI. By signing this certificate, neither the Inspector nor examinations and corrective measures described in employer shall be liable in any manner for any perso connected with this inspection.	by Arkwright Mutual Insurance Company of ponents described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner neasures described in this Owner's Report in accordance with the his employer makes any warranty, expressed or implied, concerning the this Owner's Report. Furthermore, neither the Inspector nor his

		As Required by the Provisions of the ASME Co	de SectionXI		
	States of States and States		Sheet 1 of 1		
1	Owner:	Southern California Edison Company	Unit:	2	
**		2244 Walnut Grove Avenue	MO:	96033494000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	016-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A	
		San Clemente, California 92674-0128	N-5:	S2-1204-4	
3	Work Pe	erformed by: Southern California Edison Company			
			Type C	ode Symbol Stamp	: N/A
			Author	ization No:	N/A.
4.	Identifie	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

(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	Lisega	S2-SI-044-H003	N/A	RSO-0882-96, 3972 RR1S	N/A	Replacement	No
45 1/4" Rigid Strut	Lisega	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).

Pres: N/A

Temp: N/A



NOTE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x. 11 in., (2) information in lisms 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.



(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 repair or replacement
ype Code Symbol Stamp: N/A
ertificate of Authorization No: N/A Expiration Date: N/A igned: <u>Multill Supervising ASME Codes Engineer</u> Date: <u>1/9/97</u>
CERTIFICATE OF INSPECTION
The State or Province of <u>California</u> and employed by <u>Arkwright Mutual Insurance Company</u> of <u>California</u> have inspected the components described in this Owner's Report during the period <u>MUDF 9</u> to <u>MUD997</u> , and state that to the best of my knowledge and belief, the Owner as performed examinations and taken corrective measures described in this Owner's Report in accordance with the equirements of the ASME Code, Section XI. The section of the ASME code, Section XI. The section and corrective measures described in this Owner's Report in accordance with the equirements of the ASME code, Section XI. The section of the section o
Inspector's Signature National Board, State, Province, and Endorsements
Date <u>film: 10, 1997</u>

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS maximum of the ASME Code Cartion XI

		As keduared by the Floridants of the Florida Co	de adequirant	the second statement of the local second statement of the second s	-
			Sheet 1 of 1		
. 0	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO	96033531000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
2. P	Plant:		P&ID:	40112D	
		San Clemente, California 92674-0128	N-5:	S2-1204-2	
3. 5	Work Pe	rformed by: Southern California Edison Company			
			Type C	Code Symbol Stamp: N/A	A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date: N/A	A
	2. 1		2244 Walnut Grove Avenue Rosernead, California 91770	<ol> <li>Owner: Southern California Edison Company 2244 Walnut Grove Avenue Rosernead, California 91770</li> <li>Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128</li> <li>Work Performed by: Southern California Edison Company</li> <li>Type C Author</li> </ol>	<ul> <li>Owner: Southern California Edison Company 2244 Walnut Grove Avenue Rosernead, California 91770</li> <li>Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128</li> <li>Work Performed by: Southern California Edison Company</li> <li>Work Performed by: Southern California Edison Company</li> <li>Type Code Symbol Stamp: N/A Authorization No: N/A</li> </ul>

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	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	Fermanently 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



Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in Items 1 through 0 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. NOTE



	CERTIFICATE OF COM	PLIANCE
We certify that the statements made in the of the ASME Code, Section XI.		deletion conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A		
Certificate of Authorization No: N/A Signed:	Expiration Date: Supervising ASME Codes Eng	1 1
Owner or Owner's Designee, Tit		
	CERTIFICATE OF INSPE	CTION
		in this Owner's Report during the period
1///3/9/2 to 0//2// mas performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the Ins	97, and state that t prrective measur is described in NI. spector nor his employer make	to the best of my knowledge and belief, the Owner in this Owner's Report in accordance with the es any warranty, expressed or implied, concerning th rt. Furthermore, neither the Inspector nor his
to <u>0//2//</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Inst examinations and corrective measures de employer shall be liable in any manner for	97, and state that t prrective measur is described in a XI. spector nor his employer make escribed in this Owner's Repor	to the best of my knowledge and belief, the Owner in this Owner's Report in accordance with the es any warranty, expressed or implied, concerning th
to <u>01/21</u> has performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the Ins examinations and corrective measures de	97, and state that t prrective measur is described in a XI. spector nor his employer make escribed in this Owner's Repor	to the best of my knowledge and belief, the Owner in this Owner's Report in accordance with the es any warranty, expressed or implied, concerning th rt. Furthermore, neither the Inspector nor his erty damage or a loss of any kind arising from or

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

As Required by the Provisions of the ASME Code SectionXI

- Unit: 2 Southern California Edison Company 1. Owner: 2244 Walnut Grove Avenue MO: 96033827000 Rspec: ASME SECTION XI DATA-0035 Rosemead, California 91770 P&ID: 40112A (G2) San Onofre Nuclear Generating Station 2. Plant: S2-1204-34 N-5: San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company N/A Authorization No: N/A Expiration Date:
  - 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 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: <u>System Functional Pressure Test</u> See: AR 961100995-4 Pressure: NOP

Temp: N/A



TE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 in., (2) information in liems 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.

NOTE:

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the f the ASME Code, Section XI.	report are correct and this <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed <u>Allen lie S</u> Owner or Owner's Designee, Title	upervising ASME Codes Engineer Date:
	CERTIFICATE OF INSPECTION
he state of Province of California, and e	mployed by Arkwright Mutual Insurance Company of
Waltham, Massachusetts have inspected 10///96 to 0600 has performed examinations and taken con- equirements of the ASME Code, Section By signing this certificate, neither the Inspect examinations and corrective measures des	d the components described in this Owner's Report during the period 9/97, and state that to the best of my knowledge and belief, the Owner rective measures described in this Owner's Report in accordance with the
Waltham, Massachusetts have inspected to	d the components described in this Owner's Report during the period 2/9/7, and state that to the best of my knowledge and belief, the Owner rective measures described in this Owner's Report in accordance with the XI. pector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his r any personal injury or property damage or a loss of any kind arising from or
Valtham, Massachusetts have inspected to	d the components described in this Owner's Report during the period 2/2/7, and state that to the best of my knowledge and belief, the Owner rective measures described in this Owner's Report in accordance with the XI. sector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his

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

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern C	alifornia Edison Company	Unit:	2	
			ut Grove Avenue	CWO:	96033981000	
		Rosemead,	California 91770	Rspec:	GEN-105 R1	
				P&ID:	40141A	
2.	Plant:		Nuclear Generating Station nte, California 92674-0128	N-5:	S2-1201-3	
				Туре С	ode Symbol Stamp	: N/A
3.	Work Pe	erformed by:	Bechtel Construction Company	Author	ization No:	N/A
			P. O. Box 450 San Clemente, CA 92674-0128	Expira	tion Date:	N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class1, 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 (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

See: AR 961100993-12

Temp: N/A

Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is  $\delta / (2 \text{ in } x + 1) \text{ in } (2)$  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  $\lambda | A \rangle$ . NOTE

We certify that the statements made in the of the ASME Code, Section XI. Type Code Symbol Stamp: N/A Certificate of Authorization No: N/A	e report are correct and this <u>replacement</u> conforms to the rules repair or replacement		
Certificate of Authorization No: N/A			
	Expiration Date: N/A		
Signed: <u>Muilu</u> Supervising ASME Codes Engineer Date: <u>4/10/97</u> Owner or Owner's Designee, Title			
	CERTIFICATE OF INSPECTION		
has performed examinations and taken c requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d	spector nor his employer makes any warranty, expressed or implies, concerning th lescribed in this Owner's Report. Furthermore, neither the Inspector nor his		
employer shall be liable in any manner f connected with this inspection.	for any personal injury or property damage or a loss of any kind arising from or Commissions 1862 California		

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	96040025000		
		Rosemead, California 91770	Rspec:	GEN-106, R2		
1.	-		P&ID:	40111A		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1201-3		
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Sta	and the second s	
				ization No:	N/A	
4.	Identifie	cation of System: Reactor Coolant	Expirat	tion Date:	N/A	

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 Mapufacturer	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: <u>System Leakage Pressure Test</u> See: AR 961100993-3 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 m. x 11 m., (2) information in items 1 through 6 on this report is included on each sizer, 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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the of the ASME Code, Section XI.	e report are correct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Signed: <u>Manual S</u> Owner of Owner's Designee, Titl	Expiration Date: N/A Supervising ASME Codes Engineer Date: <u>6/10/97</u> le
	CERTIFICATE OF INSPECTION
the State or Province of California, and	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of
the State or Province of <u>California</u> , and <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>11/22/96</u> to <u>10/11/</u> has performed examinations and taken or requirements of the ASME Code, Section	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>477</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the m XI.
the State or Province of <u>California</u> , and <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>11/22/96</u> to <u>10/11/</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Inspectations and corrective measures de	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> , and <u>Waltham, Massachusetts</u> have inspected <u>11/22/96</u> to <u>10/11/2</u> has performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the Insection examinations and corrective measures de employer shall be liable in any manner for	employed by <u>Arkwright Mutual Insurance Companv</u> of ed the components described in this Owner's Report during the period <u>7</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the m XI. spector nor his employer makes any warranty, expressed or implied, concerning escribed in this Owner's Report. Furthermore, neither the Inspector nor his

		As Required by the Provisions of the ASME Co	nde SectionXI		
	and the second second second second		Sheet 1 of 1		
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040311000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112D	
		San Clemente, California 92674-0128	N-5:	S2-1204-3	
3.	Work Pe	rformed by: Southern California Edison Company			
			Type (	Code Symbol Stamp	p: N/A
			Author	rization No:	N/A
4	Identific	cation of System: Safety Injection and Shutdown Cooling	Expira	ition 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 10-6	Pacific Scientific	3435	N/A	S2SI045H008	1978	Replaced	Yes
39 7/8" Rigid Strut	Lisega	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).

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 m. x 11 in., (2) mformation 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 mitialed and dated by the Owner or Owner's designee and the ALA.

(Applicable Manufact	
CERTIFICA	TE OF COMPLIANCE
We certify that the statements made in the report are correct of the ASME Code, Section XI.	ct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Exp	biration Date: N/A
Signed: <u>Multille</u> Supervising ASM Owner or Owner's Designee, Title	E Codes Engineer Date: 1/9/97
CERTIFICAT	E OF INSPECTION
, the undersigned holding a valid commission issued by th	e National Board of Boiler and Pressure Vessel Inspectors and
the State or Province of <u>California</u> and employed by <u>Ark</u> Waltham, <u>Massachusetts</u> have inspected the component 11/18/96 to 01/10/97 , ar	ne National Board of Boiler and Pressure Vessel Inspectors and wright Mutual Insurance Company of is described in this Owner's Report during the period and state that to the best of my knowledge and belief, the Owner is described in this Owner's Report in accordance with the
the State or Province of <u>California</u> and employed by <u>Ark</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the component <u>11118/96</u> to <u>01110/97</u> , ar has performed examinations and taken corrective measure requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his em examinations and corrective measures described in this O	cwright Mutual Insurance Company of is described in this Owner's Report during the period and state that to the best of my knowledge and belief, the Owner is described in this Owner's Report in accordance with the uployer makes any warranty, expressed or implied, concerning the
he State or Province of <u>California</u> and employed by <u>Ark</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the component <u>11118796</u> to <u>0111077</u> , ar has performed examinations and taken corrective measure requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his em examinations and corrective measures described in this Or employer shall be liable in any manner for any personal in connected with this inspection.	cwright Mutual Insurance Company of is described in this Owner's Report during the period and state that to the best of my knowledge and belief, the Owner is described in this Owner's Report in accordance with the aployer makes any warranty, expressed or implied, concerning the wner's Report. Furthermore, neither the Inspector nor his

	As Required by the Provisions of the ASME Co			
arabron surv. Advance		Sheet 1 of 1		
1. Owner	Southern California Edison Company	Unit:	2	
	2244 Wainut Grove Avenue	MO:	96040329000	
	Rosemead, California 91770	DCP:	2-6683.05SP	
		Rspec:	015-96	
2. Plant:	San Onofre Nuclear Generating Station	P&ID:	40112D	
	San Clemente, California 92674-0128	N-5:	52-1204-2	
3. Work	Performed by: Southern California Edison Company			
			ode Symbol Stamp ization No:	N/A
4. Identi	fication of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

(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 Buin	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, aketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (2) suformation 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.



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We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this	deletion confor	
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Da	nte: N/A	
	upervising ASME Codes I	Engineer Dat	e: 1/20/47
Owner or Owner's Designee, Title	e		
		DECTION	
an a	CEDTIFICATE OF INS		
he State or Province of <u>California</u> , and e Waltham, <u>Massachusetts</u> have inspecte ////8/96 to 0/2//	mployed by <u>Arkwright M</u> d the components describe 96, and state th	l Board of Boiler ( <b>Jutual Insurance</b> d in this Owner's l at to the best of m	Company of Report during the period y knowledge and belief, the Owner
has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection.	asion issued by the National imployed by <u>Arkwright M</u> d the components describe <u>966</u> , and state the rective measures described XI. pector nor his employer ma scribed in this Owner's Rep r any personal injury or pro-	l Board of Boiler a <u>futual Insurance</u> d in this Owner's l at to the best of my d in this Owner's l ukes any warranty, port. Furthermore operty damage or a	<u>Company</u> of Report during the period y knowledge and belief, the Owner Report in accordance with the expressed or implied, concerning the part of the Inspector nor his a loss of any kind arising from or
the State or Province of <u>California</u> , and e <u>Waltham, Massachusetts</u> have inspected <u>11/18/96</u> to <u>01/21/</u> has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	sion issued by the National mployed by <u>Arkwright M</u> d the components describe <u>966</u> , and state the rective measures describe XI. pector nor his employer ma scribed in this Owner's Rep r any personal injury or pro- <u>Commissions</u>	I Board of Boiler a <b>Intual Insurance</b> d in this Owner's I at to the best of my d in this Owner's I ukes any warranty, port. Furthermore operty damage or a 18622	<u>Company</u> of Report during the period y knowledge and belief, the Owner Report in accordance with the expressed or implied, concerning the part of the Inspector nor his a loss of any kind arising from or

			As Kequared by the Provisions of the ASME	Code second		
-		S Toron management and street in the second second		Shoet 1 of 1		
	1.	Owner:	Southern California Edison Company	Unit:	2	
			2244 Walnut Grove Avenue	MO:	96040351000	
			Rosemead, California 91770	DCP:	2-6683.05SP	
				Rspec:	015-96	
	2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113B	
			San Clemente, California 92674-0128	N-5:	S2-1204-2	
	3.	Work Pe	rformed by: Southern California Edison Company			
				Author	ode Symbol Stamp ization No:	N/A
	4.	Identific	ation of System: Reactor Coolant	Expira	tion 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 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-1204-045-2A (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 lasts, aketches, or drawings may be used provided (1) size is 8 1/2 m. x [1] m., (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 nutialed and daued by the Owner or Owner's designee and the ALA.



	CERTIFICATE OF CO	OMPLIANCE	an a
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this	deletion conform repair or replacement	is to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration D	ate: N/A	
Signed: <u>Multiclus</u> Owner or Owner's Designee, Title	upervising ASME Codes ] e	Engineer Date:	1/20/97
	CERTIFICATE OF INS	PECTION	
, the undersigned holding a valid commis	sion issued by the Nations	al Board of Boiler an	d Pressure Vessel Inspectors and
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>1//18/9/2</u> to <u>0//2/</u> has performed examinations and taken co	mployed by <u>Arkwright M</u> d the components describe <u>97</u> , and state th rrective measures describe	al Board of Boiler an <u>Autual Insurance C</u> ed in this Owner's Re uat to the best of my h	company of eport during the period cnowledge and belief, the Owner
I, the undersigned holding a valid commis- the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>1//18/9/2</u> to <u>0//2//</u> has performed examinations and taken co- requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures de employer shall be liable in any manner fo connected with this inspection.	mployed by <u>Arkwright N</u> d the components describe <u>97</u> , and state the rective measures describe XI. pector nor his employer m scribed in this Owner's Re	al Board of Boiler an <u>Autual Insurance C</u> ed in this Owner's Re to the best of my h ed in this Owner's Re akes any warranty, en port. Furthermore, r	<u>company</u> of eport during the period cnowledge and belief, the Owner eport in accordance with the xpressed or implied, concerning the neither the Inspector nor his
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>11/18/9/2</u> to <u>01/21/</u> has performed examinations and taken correquirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures de employer shall be liable in any manner for	mployed by <u>Arkwright N</u> d the components describe <u>97</u> , and state the rective measures describe XI. pector nor his employer m scribed in this Owner's Re r any personal injury or pr Commissions	al Board of Boiler an <u>Autual Insurance C</u> ed in this Owner's Re- tat to the best of my b ed in this Owner's Re- akes any warranty, en port. Furthermore, r operty damage or a 1 1862	<u>company</u> of eport during the period cnowledge and belief, the Owner eport in accordance with the xpressed or implied, concerning the neither the Inspector nor his

		Sheet 1 of 1		
Owner:	Southern California Edison Company	Unit:	2	
Ownes.	2244 Walnut Grove Avenue	MO:	96040352000	
	Rosemead, California 91770	DCP:	2-6683.05SP	
		Rspec:	015-96	
Plant:	San Onofre Nuclear Generating Station		40112C	
	San Clemente, California 92674-0128	N-5:	S2-1204-2	
Work F	erformed by: Southern California Edison Company		in the balance	
TT OLK A		Type C	ode Symbol Stamp:	N/A
			ization No:	N/A
Identif	ication of System: Safety Injection and Shutdown Cooling	Expira	tion 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 Buik	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.



Pres: N/A

Temp: N/A

NOTE: Supplemental sheets in the form of lists, skatches, 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.

	CERTIFICATE OF CO	MPLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this	deletion conform repair or replacement	
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Dat	e: N/A	
Signed: <u>Aller let S</u> Owner or Owner's Designee, Title	apervising ASME Codes E	ngineer Date	1/20/47
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspected 11/07/9/0 to 0//2//	mployed by <u>Arkwright M</u> the components described 97, and state tha	Board of Boiler at utual Insurance in this Owner's R t to the best of my	<u>Company</u> of eport during the period knowledge and belief, the Owner
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspected to <u>MADA</u> has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection.	sion issued by the National mployed by <u>Arkwright M</u> the components described <u>97</u> , and state tha rective measures described XI. ector nor his employer mal cribed in this Owner's Rep any personal injury or pro-	Board of Boiler at utual Insurance of in this Owner's R to the best of my in this Owner's R kes any warranty, o ort. Furthermore, perty damage or a	<u>Company</u> of leport during the period knowledge and belief, the Owner leport in accordance with the expressed or implied, concerning the neither the Inspector nor his loss of any kind arising from or
I, the undersigned holding a valid commiss the State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>MOT/96</u> to <u>MASSACHUSETS</u> has performed examinations and taken con- requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection. <u>Mandatum</u> Inspector's Signature	sion issued by the National mployed by <u>Arkwright M</u> the components described <u>97</u> , and state tha rective measures described XI. ector nor his employer mal cribed in this Owner's Rep any personal injury or pro	Board of Boiler at utual Insurance of in this Owner's R to the best of my in this Owner's R kes any warranty, o ort. Furthermore, perty damage or a 866.2	<u>Company</u> of leport during the period knowledge and belief, the Owner leport in accordance with the expressed or implied, concerning th neither the Inspector nor his

		As Required by the Provisions of the ASME Co	ide Section XI
	OVER LANCE WARD STORES		Sheet 1 of i
1.	Owner:	Southern California Edison Company	Unit: 2
		2244 Walnut Grove Avenue	MO: 96040354000
		Rosemead, California 91770	DCP: 2-6683.05SP
			Rspec: 016-96
2.	Plant:	San Onofre Nuclear Generating Station	P&ID: 40113B
		San Clemente, California 92674-0128	N-5: S2-1204-2
3.	Work Pe	rformed by: Southern California Edison Company	
			Type Code Symbol Stamp: N/A
			Authorization No: N/A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expiration Date: N/A

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

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

(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 installed and dated by the Owner or Owner's designee and the ALA.

(Applicable Manufacturer's Data Reports are available on-sate)	and an international sector
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this of the ASME Code, Section XI.	
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Date: N/A	
Signed: <u>Multill</u> Supervising ASME Codes Engineer Date: <u>1/20/97</u> Owner or Owner's Designee, Title	-
CERTIFICATE OF INSPECTION	
the State or Province of <u>California</u> , and employed by <u>Arkwright Mutual Insurance Company</u> of <u>Waltham</u> , <u>Massachusetts</u> have inspected the components described in this Owner's Report during the period <u>11/18/96</u> to <u>01/21/97</u> , and state that to the best of my knowledge and belief, the has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.	the
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, cond examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor h employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising fro connected with this inspection.	his
alteoniper Commissions 1862 California	199
Inspector's Signature National Board, State, Province, and Endorsen	nents
10,01,007	
Date 4221, 201, 1971	

		As Required by the Frontaining of the France of	rate and a state to be		And a state of the
Contra III	and it was a provide the state of the		Sheet 1 of 1		
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040356000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
		고 있는 것 같은 것 같	Rspec:	016-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40111A	
		San Clemente, California 92674-0128	N-5:	S2-1204-2	
3	Work Pe	erformed by: Southern California Edison Company			
			Author	Code Symbol Stamp: rization No:	N/A
4	Identifie	cation of System: Safety Injection and Shutdown Cooling	Expira	tion 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	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 ltems 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's designee and the ALA.



	(Applicable Manufacturer's Data Reports are available on-as	e)
	CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	e report are correct and this replacement repair or replacement repair or replacement of replace	
Type Code Symbol Stamp: N/A		
Signed: <u>Owner or Owner's Designee</u> , Tit	Expiration Date: N/A Supervising ASME Codes Engineer le	Date:
	CERTIFICATE OF INSPECTION	
I, the undersigned holding a valid commi- the State or Province of <u>California</u> , and Waltham, Massachusetts have inspect	employed by Arkwright Mutual Insura	nce Company of
the State or Province of <u>California</u> , and Waltham, Massachusetts have inspect 11/18/9(0 to 0/12)	employed by <u>Arkwright Mutual Insura</u> ed the components described in this Own <u>97</u> , and state that to the best corrective measures described in this Own	nce Company of er's Report during the period of my knowledge and belief, the Owner
the State or Province of <u>California</u> , and <u>Waltham</u> , <u>Massachusetts</u> have inspect <u>11/18/976</u> to <u>01/27</u> has performed examinations and taken for requirements of the ASME Code, Section By signing this certificate, neither the Ins examinations and corrective measures de	employed by <u>Arkwright Mutual Insura</u> ed the components described in this Own <u>97</u> , and state that to the best o prrective measures described in this Own n XI.	Ince Company of er's Report during the period of my knowledge and belief, the Owner er's Report in accordance with the unty, expressed or implied, concerning the pore, neither the Inspector nor his
the State or Province of <u>California</u> , and <u>Waltham</u> , <u>Massachusetts</u> have inspect <u>11/1/2/9/0</u> to <u>01/2/</u> has performed examinations and taken for requirements of the ASME Code, Section By signing this certificate, neither the Ins examinations and corrective measures de employer shall be liable in any manner for	employed by <u>Arkwright Mutual Insura</u> ed the components described in this Own <u>197</u> , and state that to the best of prective measures described in this Own n XI. Spector nor his employer makes any warra escribed in this Owner's Report. Furthern	Ince Company of er's Report during the period of my knowledge and belief, the Owner er's Report in accordance with the unty, expressed or implied, concerning the pore, neither the Inspector nor his

As Remared by the Provisions of the ASME Code SectionXC

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 96040912000 GEN-106, R2	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40111A S2-1201-3	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A
4	Identific	ation of System: Reactor Coolant	Expirat	tion Date:	N/A

- 5. (a) Applicable Construction Code: ASME Section III, 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 Gř Manufacturer	Manufacturer Senal 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-0560	N/A	S21201MP003	1978	***	Yes
Mechanical Seal Cartridge	Bingham - Willamette	1659057-2	1173	SO23-CART-#23	1986	Replaced	Yes
Mechanical Seal Cartridge	Bingham - Willamette	1714880-1	1169	RSO-3476-86, SO23-CART-#19	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 961100993-6

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

CERT	IFICATE OF COMPLIANCE	
We certify that the statements made in the report are of the ASME Code, Section XI.	e correct and this <u>reg tacement</u> conforms to the rules rep ir or replacement	
Type Code Symbol Stamp: N/A		
Certificate of Authorization No: N/A	Expiration Date: N/A	
Signed: <u>Alfgill</u> <u>Supervising</u> Owner or Owner's Designee, Title	g ASME Codes Engineer Date: 5/15/97	<u> </u>
CERTI	FICATE OF INSPECTION	
I, the undersigned holding a valid commission issue the State or Province of California, and employed h	d by the National Board of Boiler and Pressure Vessel	Inspectors and
the State or Province of <u>California</u> and employed to Waltham, <u>Massachusetts</u> have inspected the comp 11/22/96to05/15/97	ed by the National Board of Boiler and Pressure Vessel by <u>Arkwright Mutual Insurance Company</u> of ponents described in this Owner's Report during the per , and state that to the best of my knowledge and bel measures described in this Owner's Report in accordance	riod lief, the Owner
the State or Province of <u>California</u> , and employed to Waltham, <u>Massachusetts</u> have inspected the comp <u>1//22/96</u> to <u>05//5/97</u> has performed examinations and taken corrective m requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor examinations and corrective measures described in	by <u>Arkwright Mutual Insurance Company</u> of ponents described in this Owner's Report during the per , and state that to the best of my knowledge and be	riod lief, the Owner e with the d, concerning the pr nor his
the State or Province of <u>California</u> and employed to <u>Waltham</u> , <u>Massachusetts</u> have inspected the comp <u>11/22/96</u> to <u>05/15/97</u> has performed examinations and taken corrective m requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor examinations and corrective measures described in employer shall be liable in any manner for any perso connected with this inspection.	by Arkwright Mutual Insurance Company of ponents described in this Owner's Report during the per , and state that to the best of my knowledge and bel measures described in this Owner's Report in accordance Lis employer makes any warranty, expressed or implied this Owner's Report. Furthermore, neither the Inspector	riod lief, the Owner e with the d, concerning the or nor his sing from or

### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section 2

-		a ben an management an approved and approximate starts. A complete a start of the same start and a set and a set	Sheet 1 of 1		
1	Owner:	Southern California Edison Company	Unit:	2	
	O HIGH	2244 Walnut Grove Avenue	MO:	96040943000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	016-96	
2.	Plant:	San Onofre Nuclear Generating Station	and the second se	40113B	
		San Clemente, California \$2674-0128	N-5:	S2-1204-2	
3	Work P	erformed by: Southern California Edison Company			
2.	HUILI		Type C	ode Symbol Stamp:	N/A
				ization No:	N/A
4	Identifi	cation of System: Safety Injection and Shutdown Cooling	Expira	tion 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).

Pres: N/A

Temp: N/A



NOTE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is \$ 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's designee and the ALA.

NAMES OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.	5	ppiscable Manufacturer's Data Repo	TEL MET AT BUILDING OFFICIALS	
	C	CERTIFICATE OF CO	MPLIANCE	
We certify that the state of the ASME Code, Se	ements made in the repo ection XI.	ort are correct and this	replacement co	onforms to the rules
Type Code Symbol Sta	amp: N/A			
Certificate of Authoriz Signed: <u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	. 1.1 -	Expiration Da		
	CI	ERTIFICATE OF INS	PECTION	
the State or Province of Waltham, Massachu ////8/96 has performed examin	to 0///0/9	oyed by <u>Arkwright M</u> e components describe 7, and state th tive measures describe	d in this Owner's l at to the best of my	nd Pressure Vessel Insrectors and <u>Company</u> of Report during the period / knowledge and belief, the Owner Report in accordance with the
By signing this certific	rective measures describ ble in any manner for any	ed in this Owner's Re	port. Furthermore	expressed or implied, concerning the , neither the Inspector nor his a loss of any kind arising from or
employer shall be liab	poccuou.			
employer shall be liab connected with this in	annon	Commissions	1862	California

	Names of Cold and Address of Cold and	As Required by the Provisions of the ASME Co	NATIONAL CONTRACTOR OF THE ADDRESS OF THE ADDRESS	The sub-subscription of the subscription of th	
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Sheet 1 of 1 Unit: MO: DCP:	2 96040946000 2-6683.05SP	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		015-96 40113A S2-1204-5	
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A
4	Identific	cation of System: Safety Injection and Shutdown Cooling		tion Date:	N/A

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

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

(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	38658	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.

Pres: N/A

Temp: N/A



NOTE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m., (2) suformation 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.



and a state of the second s	(Applicable Manufacturer's Data Rep	orts are available on-arte	)
	CERTIFICATE OF CO	OMPLIANCE	
We certify that the statements made in the re of the ASME Code, Section XI.	eport are correct and this	deletion con repair or replace	nforms to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A Signed: <u><u>Mulleilet</u> Sur</u> Owner or Owner's Designee, Title	Expiration D		Date: 1/9/97
I, the undersigned holding a valid commissi the State or Province of <u>California</u> , and em Waltham, Massachusetts have inspected	ployed by <u>Arkwright N</u> the components describe <u>7</u> , and state th ective measures describe	al Board of Boil <u>Sute al Susuran</u> d in this Owne at to the best of	nce Company of r's Report during the period f my knowledge and belief, the Owner
By signing this certificate, neither the Inspe examinations and corrective measures descr employer shall be liable in any manner for a connected with this inspection.	ribed in this Owner's Re	port. Furtherm	ore, neither the Inspector nor his
: Alhompson	Commissions /	862	California
Date Jan, 10, 1997			State, Province, and Endorsements

### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section.XI

	And a sear - the PP warmen and		Sheet 1 of 1		
1	Owner:	Southern California Edison Company	Unit:	2	
	o mast.	2244 Walnut Grove Avenue	MO:	\$6040947000	
		Rosemead, California 9177	DCP:	2-6683.05SP	
			Rspec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A	
		San Clemente, California 92674-0128	N-5:	S2-1204-10	
3	Work Pe	rformed by: Southern California Edison Company			
			Type C	Code Symbol Stamp:	
				rization No:	N/A
4	Identific	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III. NF. Class2, 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	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 'ardware 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 lasts, sketches, or drawings may be used provided (1) size is \$ 1/2 m. x 11 m., (2) information in literus 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 minated and dated by the Owner or Owner's designee and the ALA.

9. Remarks : No.10.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the of the ASME Code, Section XI. Type Code Symbol Stamp: N/A	
igned: <u><u>Multilu</u> Owner or Owner's Designee, Tit</u>	Expiration Date: N/A Supervising ASME Codes Engineer Date: 1/9/97 le
	CERTIFICATE OF INSPECTION
he State or Province of California, and	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of ed <u>Ahe</u> components described in this Owner's Report during the period
he State or Province of <u>California</u> and Waltham, <u>Massachusetts</u> have inspect <u>11/08/96</u> to <u>01/16</u> has performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the In- examinations and corrective measures do employer shall be liable in any manner for	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period , and state that to the best of my knowledge and belief, the Owner porrective measures described in this Owner's Report in accordance with the
he State or Province of <u>California</u> and <u>Waltham</u> , <u>Massachusetts</u> have inspect <u>11/08/96</u> to <u>01/16</u> has performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the Im- examinations and corrective measures do	employed by <u>Arkwright Mutual Insurance Company</u> of edithe components described in this Owner's Report during the period <u>1977</u> , and state that to the best of my knowledge and belief, the Owner porrective measures described in this Owner's Report in accordance with the in XI. spector nor his employer makes any warranty, expressed or implied, concerning the escribed in this Owner's Report. Furthermore, neither the Inspector nor his

		As Required by the Provisions of the ASME Co	de SectionXI		
	APP CALL OF CALL OF A DESIGN AND A		Short 1 of 1	States of a local system of an and some of the second system of the	
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040948000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	018-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A	
		San Clemente, California 92674-0128	N-5:	S2-1204-5	
3.	Work Pe	rformed by: Southern California Edison Company			
				ode Symbol Stamp: ization No:	N/A N/A
4	Identifie	cation of Cystem: Safety Injection and Shutdown Cooling	Expira	tion 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	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 lasts, aketches, or drawings may be used provided (1) size is \$ 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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Mullill</u> Owner or Owner's Designee, Title	Supervising ASME Codes Engineer Date: 1/9/97
1	CERTIFICATE OF INSPECTION
, the undersigned holding a valid commis	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>12/03/96</u> to <u>0</u> /// has performed examinations and taken co	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period 0/97, and state that to the best of my knowledge and belief, the Owner prective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte to <u>O////</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner fo	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkvright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period 0/97, and state that to the best of my knowledge and belief, the Owner prective measures described in this Owner's Report in accordance with the a XI.
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte to <u>OUM</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner fo connected with this inspection.	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period 0/97, and state that to the best of my knowledge and belief, the Owner prective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte to <u>O////</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner fo	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkvright Mutual Insurance Compan</u> of ed the components described in this Owner's Report during the period <u>OPT</u> , and state that to the best of my knowledge and belief, the Owner prective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his

-		As Required by the Provisions of the ASME Co	ode Saction XI		
1.	Owner:	Southero California Edison Company 2244 Walnut Grove Avenue	Sheet 1 of 1 Unit: MO:	2 96040949000	
		Resembed, California 91770	DCP:	2-6683.05SP	
2.	Plant:	S Nuclear Generating Station	P&ID:	016-96 40113A S2-1204-5	
3.	Work Pe	rformed by: Southern California Edison Company			
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Author	ode Symbol Sta ization No: tion Date:	mp: N/A N/A N/A

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

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

(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	\$2-51-063-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-E1-023	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 lasts, aketches, or drawings may be used provided (1) size is \$ 1/2 m, x 11 m., (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.



	(Appleable Manufacture's Data Reports are available on-atte)
	CERTIFICATE OF COMPLIANCE
We certify that the statements n of the ASME Code, Section XI	made in the report are correct and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N	I/A
Certificate of Authorization No Signed: <u><u><u>Authoris</u></u> Owner or Owner's Des</u>	L Supervising ASME Codes Engineer Date: 1/9/97
	CERTIFICATE OF INSPECTION
	rnia and employed by Arkwright Mutual Insurance Company of we inspected the components described in this Owner's Report during the period
has performed examinations ar requirements of the ASME Co By signing this certificate, neit	0///0/97, and state that to the best of my knowledge and belief, the Owner ad taken corrective measures described in this Owner's Report in accordance with the de, Section XI. her the Inspector nor his employer makes any warranty, expressed or implied, concerning the
has performed examinations ar requirements of the ASME Co By signing this certificate, neit examinations and corrective m	<u>01110</u> / <u>97</u> , and state that to the best of my knowledge and belief, the Owner ad taken corrective measures described in this Owner's Report in accordance with the de, Section XI. ther the Inspector nor his employer makes any warranty, expressed or implied, concerning the measures described in this Owner's Report. Furthermore, neither the Inspector nor his manner for any personal injury or property damage or a loss of any kind arising from or
to to the sperformed examinations ar requirements of the ASME Co By signing this certificate, neither examinations and corrective memployer shall be liable in any	<u>01110</u> / <u>97</u> , and state that to the best of my knowledge and belief, the Owner ad taken corrective measures described in this Owner's Report in accordance with the de, Section XI. ther the Inspector nor his employer makes any warranty, expressed or implied, concerning the measures described in this Owner's Report. Furthermore, neither the Inspector nor his manner for any personal injury or property damage or a loss of any kind arising from or

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code SectionXI

	Construct of Descent and Print Print Print Print		Sheet 1 of 1	and have a first of the second sec	ente l'annue internere
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040950000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
1	-		Rspec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A	
		San Clemente, California 92674-0128	N-5: 4	S2-1204-4	
3.	Work Pe	erformed by: Southern California Edison Company			
		2월 17일 - CENTER CENTER - CENT	Type C	ode Symbol Stamp	: N/A
			Author	ization No:	N/A
4	Identific	cation of System: Safety Injection and Shutdown Cooling	Expirat	tion Date:	N/A

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

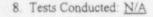
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

#### 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 Stanped 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.



Pres: N/A

Temp: N/A



NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 ar., (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.



	pplicable Manufacturer's Data Reports	are available on-este)	
	CERTIFICATE OF CON	<b>IPLIANCE</b>	
We certify that the statements made in the rep of the ASME Code, Section XI.	ort are correct and this	deletion conforms repair or replacement	to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A Signed: <u>Multiplication</u> Supe Owner or Owner's Designee, Title	Expiration Date		1/20/47
C I, the undersigned holding a valid commission	ERTIFICATE OF INSP		Pressure Vessel Inspectors and
the State or Province of <u>California</u> , and emp <u>Waltham, Massachusetts</u> have inspected th <u>11/08/96</u> to <u>01/21/96</u> has performed examinations and taken correct requirements of the ASME Code, Section 20	loyed by <u>Arkwright Mu</u> e components described Z, and state that tive measures described	in this Owner's Rep to the best of my kn	mpany of ort during the period owledge and belief, the Owner
By signing this certificate, neither the Inspec examinations and corrective measures descri- employer shall be liable in any manner for an connected with this inspection.	bed in this Owner's Repo	ort. Furthermore, ne	ither the Inspector nor his
alhomoson	Commissions 18	\$62	California
Inspector's Signature	Na	tional Board, State, I	Province, and Endorsements
no la 11 1007			

		As Required by the Provisions of the ASME Co	de SectionXI		
			Sheet 1 of 1	a na ang ang ang ang ang ang ang ang ang	
1.	Owner:	Southern California Edison Company	Unit:	2	1.11
		2244 Walnut Grove Avenue	MO:	96040951000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	016-96	
2	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113A	
		San Clemente, California 92674-0128	N-5:	S2-1204-4	
3.	Work Pe	erformed by: Southern California Edison Company			
			Type C	ode Symbol Stamp:	N/A
			Author	ization No:	N/A
4.	Identific	cation of System: Safety Injection and Shutdown Cooling	Expirat	tion Date:	N/A

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

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

(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	Manufucturer 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-S1-064-H-007	N/A	RSO-0882-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	3995	N/A	S2S1064H013	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



Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 m., (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. NOTE



9. Remarks : None.

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CERTIFICATE C	OF COMPLIANCE
e certify that the statements made in the report are correct and the ASME Code, Section XI.	d this <u>replacement</u> conforms to the rules repair or replacement
pe Code Symbol Stamp: N/A	
no all. 11	on Date: N/A
gned: <u>Ult Migritut</u> <u>Supervising ASME Co</u> Owner or Owner's Designee, Title	odes Engineer Date: 1/20/97
CERTIFICATE OF	INSPECTION
y signing this certificate, neither the Inspector nor his employed aminations and corrective measures described in this Owner' aployer shall be liable in any manner for any personal injury of annected with this inspection.	er makes any warranty, expressed or implied, concerning th 's Report. Furthermore, neither the Inspector nor his or property damage or a loss of any kind arising from or
Inspector's Signature Commissions	
	National Board, State, Province, and Endorsements

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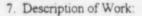
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States of state			Sheet 1 of 1		
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040953000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			R spec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113B	
		San Clemente, California 92674-0128	N-5:	S2-1204-2	
3	Work Pe	rformed by: Southern California Edison Company			
-			Type (	Code Symbol Sta	mp: N/A
				rization No:	N/A
4	Identific	ation of System Safety Injection and Shutdown Cooling	Expira	tion 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 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



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 lasts, skenches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in literus 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.



(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 Date: 1/20/97 Supervising ASME Codes Engineer Signed: 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 velief, 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. Commissions 1862 allompson California Inspector's Signature National Board, State, Province, and Endorsements 21, 1997

		As Required by the Provisions of the ASME Co			
	and the second		Sheet 1 of 1		
	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040957000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
			Rspec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40113C	
		San Clemente, California 92674-0128	N-5:	S2-1204-9	
3.	Work Pe	rformed by: Southern California Edison Company			
			Type C	ode Symbol Stan	p: N/A
			Author	ization No:	N/A
4.	Identific	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

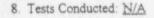
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition. No Addenda

### 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.



Pres: N/A

Temp: N/A



NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (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 designed and the ALA.





9. Remarks : None.

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(Applicable	Manufacturer's	Data	Reports	APE AVE	lable	on-site)	

#### CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this of the ASME Code, Section XI.	deletion conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Da	te: N/A
Signed: <u>AlthCifel</u> Supervising ASME Codes E	Ingineer 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 <u>California</u> and employed by <u>Arkwright Mutual Insurance Company</u> of <u>Waltham, Massachusetts</u> have inspected the components described in this Owner's Report during the period <u>11/08/96</u> to <u>01/10/97</u>, 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.

hompson Inspector's Signature

Commissions 1862

California

National Board, State, Province, and Endorsements

Date Ann. 10, 1997

	As Required by the Provisions of the ASME C.o.	de SectionXI		
Contraction of the second second second		Short 1 of 1		
Owner:	Southern California Edison Company	Unit:	2	
	2244 Walnut Grove Avenue	MO:	96040958000	
	Rosemead, California 91770	DCP:	2-6683.05SP	
		Rspec:	016-96	
	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID:	40113B	
		N-5:	S2-1204-2	
Work Pe	rformed by: Southern California Edison Company			
		Type C	ode Symbol Stamp	: N/A
				N/A
Identific	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A
	Plant: Work Pe	Owner: Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128	Owner:Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770Unit: MO: DCP:Plant:San Onofre Nuclear Generating Station San Clemente, California 92674-0128Rspec: P&ID: N-5:Work Performed by:Southern California Edison CompanyType C Author	Owner:       Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770       Unit:       2         MO:       96040958000       DCP:       2-6683.05SP         Plant:       San Onofre Nuclear Generating Station San Clemente, California 92674-0128       MO:       96040958000         Work Performed by:       Southern California Edison Company       MO:       96040958000         DCP:       2-6683.05SP       Rspec:       016-96         P&ID:       40113B       N-5:       S2-1204-2         Work Performed by:       Southern California Edison Company       Type Code Symbol Stamp Authorization No:

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	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, skintches, or drawings may be used provided (1) size is \$ 1/2 in. x 11 in., (2) information in literus 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.

			And Andrew Street, Str	in succession where	
(Applicable	Manufacturer's Data	Reports i	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.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Date: 1/9/97

Signed: <u>Sur</u> Owner or Owner's Designee, Title

#### CERTIFICATE OF INSPECTION

Supervising ASME Codes Engineer

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> and employed by <u>Arkwright Mutual Insurance Company</u> of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period

Waltham, Massachusetts have inspected the components described in this Owner's Report during the period <u>111/9/96</u> to <u>011/0/97</u>, 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.

- Commissions California Manipor National Board, State, Province, and Endorsements Inspector's Signature Date (

			Sheet 1 of 1		
2	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040959000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
		그는 것은 것, 것도 같은 것 같아요. 한 것 같아요. 한 것 같아요.	Rspec:	015-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112C	
		San Clemente, California 92674-0128	N-5:	S2-1204-13	
3.	Work Pe	rformed by: Southern California Edison Company			
			Type C	ode Symbol Stamp	N/A
			Author	ization No:	N/A
4	Identific	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

(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.

Pres: N/A

Temp: N/A



NOTE Supplemental sheets in the form of lasts, 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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the ASME Code, Section XI.	the report are correct and this <u>deletion</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	
Signed: <u>Multiplet</u> Owner or Owner's Designee, T	Supervising ASME Codes Engineer Date: 1/20/97
he State or Province of <u>California</u> , an Waltham, <u>Massachusetts</u> have inspe 11/18/96 to 0/22	CERTIFICATE OF INSPECTION mission issued by the National Board of Boiler and Pressure Vessel Inspectors and ad employed by <u>Arkwright Mutual Insurance Company</u> of cted the components described in this Owner's Report during the period <u>1977</u> , and state that to the best of my knowledge and belief, the Owner
he State or Province of <u>California</u> , an <u>Waltham, Massachusetts</u> have inspe <u>11/18/94</u> to <u>01/22</u> to <u>01/22</u>	mission issued by the National Board of Boiler and Pressure Vessel Inspectors and ad employed by <u>Arkwright Mutual Insurance Company</u> of cted the components described in this Owner's Report during the period <u>1/97</u> , and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the

		As Required by the Provisions of the ASME Co	de SectionXI		
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead. California 91770	Sheet 1 of 1 Unit: MO: DCP:	2 96040960000 2-6683.05SP	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		016-96 40112C S2-1204-13	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Star	
4	. Identific	ation of System: Safety Injection and Shutdown Cooling		ization No: tion Date:	N/A N/A

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

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

(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	4103	N/A	S2SI087H007	1978	Replaced	Yes
24" Rigid Strut	Lisega	S2-SI-087-H-007	N/A	RSO-0900-96, 3922RR1S	N/A	Replacement	No
Mechanical Snubber PSA 1-4	Pacific Scientific	1118	N/A	S2SI087H011	1977	Replaced	No
14 9/16" Rigid Strut	Lisega	S2-SI-087-H-011	N/A	RSO-0900-96, 3932RR1	N/A	Replacement	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	20343	N/A	S2SI087H021	1986	Replaced	No
23 3/4" Rigid Strut	Lisega	S2-SI-087-H-021	N/A	R.SO-0900-96, 3922RR1	N/A	Replacement	No
Mechanical Snubber PSA 1-4	Pacific Scientific	3482	N/A	S2SI087H022	1978	Replacer.	Yes
28 1/4" Rigid Strut	Lisega	S2-SI-087-H-022	N/A	RSO-0900-96, 3932RR1S	N/A	Replazement	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	20362	N/A	S2SI087H026B	1986	Replaced	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	20359	N/A	S2SI087H026T	1986	Replaced	No
9 1/16" Rigid Strut (2)	Lisega	S2-SI-087-H-026	N/A	RSO-0900-96, 3922RR1	N/A	Replacement	No
Mechanical Snubber PSA 1/2-2-1/2	Pacific Scientific	7453	N/A	S2SI087H025	1979	Replaced	No
21 3/16" Rigid Strut	Lisega	S2-SI-087-H-025	N/A	RSO-0900-96, 3922RR1	N/A	Replacement	No

7. Description of Work:

 The mechanical subbers 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-1204-167-AA (PSG-186).

 8. Tests Conducted: N/A
 Pres: N/A
 Temp: N/A



NOTE: Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 m., (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.

CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct and the fine ASME Code, Section XI.	his <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration Signed: <u>MML. Lul Supervising ASME Code</u> Owner or Owner's Designee, Title	1.1-
CERTIFICATE OF D	NSPECTION
has performed examinations and taken corrective measures descri	ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner
requirements of the ASME Code, Section AI.	
By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's l employer shall be liable in any manner for any personal injury or connected with this inspection.	Report. Furthermore, neither the Inspector nor his
examinations and corrective measures described in this Owner's I employer shall be liable in any manner for any personal injury or	Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or

		FORM NIS-2 OW NER'S REPORT FOR RE. As Required by the Provisions of the ASME Co		OR REFLACEN	ILIVI
			Sheet 1 of 1		
. 0	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96040963000	
		Rosemead, California 91770	DCP:	2-6683.05SP	
		같은 비행 수 없는 것이 가지 않는 것이 같은 것이 같이 했다.	Rspec:	015-96	
. F	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112C	
		San Clemente, California 92674-0128	N-5:	S2-1204-31	
1	Work Pe	rformed by: Southern California Edison Company			
		방법 전 같은 것이 같은 것이 같이 같이 같이 같이 같이 같이 없다.	Type (	Code Symbol Stamp:	N/A
			Author	ization No:	N/A
4.	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

FORM NIC 2 OWNER'S DEPORT FOR DEPAIDS OF DEPI ACEMENTS

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.

Pres: N/A

Temp: N/A



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

9. Remarks : None.

1

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the re of the ASME Code, Section XI.	eport are correct and this <u>deletion</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A.	
Signed: <u>AMarile Sur</u> Owner or Owner's Designee, Title	Expiration Date: N/A pervising ASME Codes Engineer Date: 1/20/97
	CERTIFICATE OF INSPECTION
has performed examinations and taken corre- requirements of the ASME Code, Section X By signing this certificate, neither the Inspe- examinations and corrective measures descri-	7, and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the XI. ector nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or
has performed examinations and taken corre- requirements of the ASME Code, Section X By signing this certificate, neither the Inspe- examinations and corrective measures descr employer shall be liable in any manner for a	ective measures described in this Owner's Report in accordance with the I. ector nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his

ind

		As Required by the Provisions of the ASME Co	de SectionXI		
	CAREFORD AND A STORE & STORE		Sheet 1 of 1		
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO: 9604096		
		Rosemead, California 91770	DCP:	2-6683.05SP	
12	1.00		Rspec:	016-96	
2.	Plant:	San Onofre Nuclear Generating Station	P&ID:	40112C	
		San Clemente, California 92674-0128	N-5:	S2-1204-31	
3.	Work Pe	rformed by: Southern California Edison Company			
				ode Symbol Stamp: ization No:	N/A N/A
4	Identifie	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A

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

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

(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	Lisega	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	Lisega	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 m., (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 mitialed and dated by the Owner or Owner's designee and the AIA.





(Abbas	able Manufacturer's Data Reports	and a retrained out-antel	
CEI	RTIFICATE OF CON	PLIANCE	
We certify that the statements made in the report of the ASME Code, Section XI.		replacement con repair or replacement	nforms to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A Signed: <u>Authorization Supervis</u> Owner or Owner's Designee, Title	Expiration Date		1/20/97
CED	TIFICATE OF INSPI	ECTION	
I, the undersigned holding a valid commission is: the State or Province of <u>California</u> , and employe	sued by the National I ed by <u>Arkwright Mu</u>	Board of Boiler an tual Insurance (	Company of
I, the undersigned holding a valid commission is the State or Province of <u>California</u> , and employe <u>Waltham</u> , <u>Massachusetts</u> have inspected the co <u>11/12/96</u> to <u>01/21/97</u> has performed examinations and taken corrective	sued by the National I ad by <u>Arkwright Mu</u> proponents described , and state that	Board of Boiler an tual Insurance ( in this Owner's Ro to the best of my	Company of eport during the period knowledge and belief, the Owner
I, the undersigned holding a valid commission is the State or Province of <u>California</u> , and employed <u>Waltham</u> , <u>Massachusetts</u> have inspected the co <u>Waltham</u> , <u>Massachusetts</u> have inspector <u>Massachuset</u> have inspected to <u>Massachuset</u> have inspected the co <u>Waltham</u> , <u>Massachuset</u> have inspecto	sued by the National I ad by <u>Arkwright Mu</u> omponents described , and state that measures described for his employer make in this Owner's Repo	Board of Boiler an tual Insurance ( in this Owner's Ro to the best of my l in this Owner's Ro es any warranty, e rt. Furthermore, 1	Company of eport during the period knowledge and belief, the Owner eport in accordance with the expressed or implied, concerning the neither the Inspector nor his
I, the undersigned holding a valid commission is the State or Province of <u>California</u> , and employer <u>Waltham</u> , <u>Massachusetts</u> have inspected the co <u>Waltham</u> , <u>Massachusetts</u> have inspective requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector re examinations and corrective measures described employer shall be liable in any manner for any per connected with this inspection.	sued by the National I ed by <u>Arkwright Mu</u> omponents described , and state that to measures described nor his employer make in this Owner's Repo ersonal injury or prop	Board of Boiler an tual Insurance ( in this Owner's Ro to the best of my l in this Owner's Ro es any warranty, e rt. Furthermore, a erty damage or a	Company of eport during the period knowledge and belief, the Owner eport in accordance with the expressed or implied, concerning the neither the Inspector nor his
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As Required by the Provisions of the ASME Code SectionXI

1. 2.	Owner: Plant:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 San Onofre Nuclear Generating Station	Unit: 2 MO: 96041150000 96121943000 96121944000 Rspec: 125-96, ASME XI DATA-0033 P/&ID: 40112B (E3) N-5: S2-1204-12	
3.		San Clemente, California 92674-0128 rformed by: Southern California Edison Company cation 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, 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 Buik	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

See: AR 960201284-3

Pressure: NOP

Temp: N/A



NOTE Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is \$ 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.



9. Remarks : CR-3007-96 reconciles the replacement nuts which were certified to ASME III, Class 2, 1974 Edition Summer 1974 Addenda.

	COMPLIANCE
Ve certify that the statements made in the report are correct and t f the ASME Code, Section XI.	his <u>repair and replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration	Date: N/A
Signed: <u>Multille</u> Supervising ASME Code Owner or Owner's Designee, Title	es Engineer Date: 6/8/.97
CERTIFICATE OF I	NSPECTION
	THAT FORT OF FORTER AND FRESSURE VESSED THSUELUTS AND
the State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components descr <u>12/05/96</u> to <u>06/09/97</u> , and state has performed examinations and taken corrective measures descr requirements of the ASME Code, Section XI.	ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner
he State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components descr <u>12/05/96</u> to <u>06/09/97</u> , and state has performed examinations and taken corrective measures descr	t Mutual Insurance Company of ribed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ribed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning the Report. Furthermore, neither the Inspector nor his
he State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the components descr <u>12705</u> to <u>06709</u> , and state has performed examinations and taken corrective measures descr requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or	t Mutual Insurance Company of ribed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ribed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning the Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or

#### 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
Owner:	Southern California Edison Company	Unit: 2
	2244 Walnut Grove Avenue	MO: 96062131000
	Rosemead, California 91770	FCN: F13044M, F13045M
Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	Rspec: 091-96, ASME XI DATA-029 P&ID: 40124B (G2) N-5: S2-1208-5 & 11
Work P	erformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A
Identifi	cation of System: Chemical and Volume Control	Authorization No: N/A Expiration Date: N/A

5. (a) Applicable Construction Code: <u>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</u>
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda; 1992 Edition, No</u>

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:

2

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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: <u>System Leakage Pressure Test</u> See: AR 960600673 Pres: NOP

Temp: N/A

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 litems 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.

	CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the f the ASME Code, Section XI.	report are correct and this repair and re repair or replacent	placement conforms to the rules
ype Code Symbol Stamp: N/A		
Certificate of Authorization No: N/A	Expiration Date: N/A	
Signed <u>Owner or Owner's Designee</u> , Tit		nte:
	CERTIFICATE OF INSPECTION	
he State or Province of <u>California</u> , and	ssion issued by the National Board of Boile employed by <u>Arkwright Mutual Insurance</u> of the components described in this Owner	s Report during the period
he State or Province of <u>California</u> , and <u>Waitham</u> , <u>Massachusetts</u> have inspect <u>12/7/96</u> to <u>44/17</u> has performed examinations and taken of requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d employer shall be liable in any manner f	employed by <u>Arkwright Mutual Insuran</u> ed the components described in this Owner 27, and state that to the best of r prrective measures described in this Owner	re <u>Company</u> of s Report during the period ny knowledge and belief, the Owner s Report in accordance with the y, expressed or implied, concerning the re, neither the Inspector nor his
he State or Province of <u>California</u> , and <u>Waitham</u> , <u>Massachusetts</u> have inspect <u>12</u> 7796 to <u>4777</u> has performed examinations and taken or requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures of employer shall be liable in any manner to connected with this inspection.	employed by <u>Arkwright Mutual Insuran</u> ed the components described in this Owner <u>P</u> , and state that to the best of n prrective measures described in this Owner AI. spector nor his employer makes any warrant escribed in this Owner's Report. Furthermo or any personal injury or property damage o	re Company of s Report during the period ny knowledge and belief, the Owner s Report in accordance with the y, expressed or implied, concerning the re, neither the Inspector nor his r a loss of any kind arising from or
he State or Province of <u>California</u> , and <u>Waitham</u> , <u>Massachusetts</u> have inspect <u>12/7/96</u> to <u>44/17</u> has performed examinations and taken of requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d employer shall be liable in any manner f	employed by <u>Arkwright Mutual Insuran</u> ed the components described in this Owner <u>27</u> , and state that to the best of r prrective measures described in this Owner AI. spector nor his employer makes any warrant escribed in this Owner's Report. Furthermo or any personal injury or property damage of <u>Commissions</u> 1862	re Company of s Report during the period ny knowledge and belief, the Owner s Report in accordance with the y, expressed or implied, concerning the re, neither the Inspector nor his r a loss of any kind arising from or

As Required by the Provisions of the ASME Code SectionX

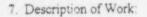
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96081814000	
		Rosemead, California 91770	Rspec:	039-96	
			P&ID:	40141D (B4)	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		S2-1301-1	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4	Identific	cation of System: Main Steam	Expirat	ion Date:	N/A

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
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



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.

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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in of the ASME Code, Section XI.	the report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed <u>All Mai let</u> Owner or Owner's Designee,	Supervising ASME Codes Engineer Date: 5/12/97
	CERTIFICATE OF INSPECTION
ne State or Province of California, a	nd employed by Arkwright Mutual Insurance Company of
Waltham, Massachusetts have inspected of the observed of the to of the the observed of the obs	ected the components described in this Owner's Report during the period 13/97, and state that to the best of my knowledge and belief, the Owner a corrective measures described in this Owner's Report in accordance with the
Waltham, Massachusetts have inspe- 09/05/9/0 to 05/2 has performed examinations and taken equirements of the ASME Code, Sec By signing this certificate, neither the examinations and corrective measures	ected the components described in this Owner's Report during the period 13/97, and state that to the best of my knowledge and belief, the Owner a corrective measures described in this Owner's Report in accordance with the

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1	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96090154003	
		Rosemead, California 91770	FCN:	F12815M	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		071-96, ASME XI 40123A (G2) S2-1208-3	I DATA 0581
3.	Work Pe	erformed by: Southern California Edison Company		Code Symbol Stamp: rization No:	N/A N/A
4	Identific	cation of System: Chemical and Volume Control	Expira	tion Date:	N/A

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
l 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	NA	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 Pres: NOP See: AR 960600865-13

Temp: N/A

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 suitailed and dated by the Owner or Owner's designee and the AIA. NOTE

9. Remarks : CR-1001-96 reconciles the replacement spindle (plug) which was certified to ASME III, Class 2, 1989 Edition, No Addenda.

Ve certify that the statements made in the report are correct and this	is replacement conforms to the rules
	is replacement conforms to the miles
f the ASME Code, Section XI.	repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration D	
igned: <u>Allei Marson</u> Supervising ASME Codes Owner or Owner's Designee, Title	<u>s Engineer</u> Date: <u>6/10/97</u>
CERTIFICATE OF IN	ISPECTION
, the undersigned holding a valid commission issued by the Nation	
he State or Province of <u>California</u> , and employed by <u>Arkwright R</u> Waltham, <u>Massachusetts</u> have inspected the components describ	
	that to the best of my knowledge and belief, the Owne
has performed examinations and taken corrective measures describ equirements of the ASME Code, Section XI.	
equirements of the Asivit worde, Section At.	
By signing this certificate, neither the Inspector nor his employer mexaminations and corrective measures described in this Owner's Re employer shall be liable in any manner for any personal injury or pre- connected with this inspection.	leport. Furthermore, neither the Inspector nor his
nolla	101-0
CommissionsCommissions	
Inspector's Signature	National Board, State, Province, and Endorsements
1	
Date June 10, 1997	

As Required by the Provisions of the ASME Code Section XI

- i. Owner: Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770
- 2. Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128
- Bechtel Construction Company 3. Work Performed by: P. O. Box 450 San Clemente, CA 92674-0128
- 2 Unit: MO: 96100613000 96090379000 DCP: 2-2075.00-0 Rspec: 086-96 R1, 087-96 P&ID: 40111A (D6) N-5 S2-1201-3-11

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, 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

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

Name of Component	Nanse Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
" 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 ! 60 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 See: AR 961100993-19

Pres: NOP

Temp: N/A



Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is \$ 1/2 in. x 11 in., (2) information in ltems 1 through 6 on this report is included on each sheet. NOTE 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 : 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.

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	CERTIFICATE OF COMP	PLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.		eplacement com pair or replacement	forms to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Date:	N/A	요즘 같은 말을 알고 있다.
Signed: <u>Multiclus</u> Owner or Owner's Designee, Title	upervising ASME Codes Engi e	neer Date	4/10/97
	CERTIFICATE OF INSPEC	CTION	
I, the undersigned holding a valid commis	sion issued by the National Bo	ard of Boiler and	Pressure Vessel Inspectors and
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>12/6/97</u> to <u>D4/11</u> has performed examinations and taken co requirements of the ASME Code, Section	mployed by <u>Arkwright Mutu</u> d the components described in <u>97</u> , and state that to rrective measures described in XI.	this Owner's Re the best of my k this Owner's Re	ompany of port during the period nowledge and belief, the Owner port in accordance with the
the State or Province of <u>California</u> , and e Waltham, <u>Massachusetts</u> have inspecte <u>12/16/97</u> to <u>D4/11/</u> has performed examinations and taken co	mployed by <u>Arkwright Mutu</u> d the components described in <u>97</u> , and state that to rrective measures described in XI. pector nor his employer makes scribed in this Owner's Report	al Insurance C this Owner's Re the best of my k this Owner's Re any warranty, ex Furthermore, p	ompany of port during the period nowledge and belief, the Owner port in accordance with the pressed or implied, concerning th either the Inspector nor his
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the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>12//6/97</u> to <u>D4////</u> has performed examinations and taken co- requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des- employer shall be liable in any manner for connected with this inspection.	mployed by <u>Arkwright Mutu</u> d the components described in <u>97</u> , and state that to rrective measures described in XI. pector nor his employer makes scribed in this Owner's Report r any personal injury or proper <u>Commissions</u>	this Owner's Re the best of my k this Owner's Re any warranty, ep Furthermore, n ty damage or a lo	ompany of port during the period nowledge and belief, the Owner port in accordance with the pressed or implied, concerning the either the Inspector nor his oss of any kind arising from or <u>California</u>
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As Required by the Provisions of the ASME Code Section XI

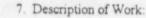
1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue Rosemead, California 91770	MO:	96101131000 961 96111008001	110458000 96111008000
2	Plant:	San Onofre Nuclear Generating Station	Rspec:	269-93 R2, ASM	E XI -0077
		San Clemente, California 92674-0128	P&ID:	40141A (F7)	
		540/4-0120	N-5:	S2-1305-8	
3.	Work Pe	rformed by: Southern California Edison Company			
		· · · · · · · · · · · · · · · · · · ·	Type C	ode Symbol Stamp	N/A
			Author	ization No:	N/A
4.	Identific	ation of System: Main Steam	Expirat	tion Date:	N/A
5	(a) Appl	inship Construction Code, ACMER Could IN COL.		de la Strinsland	

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# Filting Disc Check Valve	Anchor/Darling	2N-971	N/A	S21305MU129	1977		Yes
Disc	Anchor/Darling	G150, HL#F7076	N/A	RSO-3517-85, SA352-LCB	1985	Replacement	Yes



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-028-97 was satisfactorily performed per Repair Specification 269-93.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 930600096-8

Pressure: NOP

Temp: N/A

Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (2) mformation in lients 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 minialed and dated by the Owner's designee and the AJA.

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C.	ERTIFICATE OF COMPL				
We certify that the statements made in the report of the ASME Code, Section XI.			d replace	ment conforms to the rul	es
Type Code Symbol Stamp: N/A					
Certificate of Authorization No: N/A	Expiration Date:	N/A		1.1-	
STUTIES	vising ASME Codes Engin	eer	Drie:	6/2/97	
Owner or Owner's Designee, Title				***	
	an na hanna a san a na hada an a ka na manana da na na manana na hana na manana na manana na manana na manana m	and the second second	PO-STEPHENISHING MARKANING		
	ERTIFICATE OF INSPEC	TION	An other reasons and the second second second		
, the undersigned holding a valid commission he State or Province of <u>California</u> , and employ Waltham, Massachusetts have inspected the	components described in	this Ov	wher's Rep	ort during the period	Owner
I, the undersigned holding a valid commission the State or Province of <u>California</u> , and emplo <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>12/10/9/0</u> to <u>010/09/0</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspect	oved by <u>Arkwright Mutu</u> components described in <u>27</u> , and state that to tive measures described in or nor his employer makes	this Ov the bes this Ov any wa	wner's Rep st of my kn wner's Rep arranty, exp	ort during the period owledge and belief, the ( ort in accordance with the pressed or implied, conce ither the Inspector nor hi	Owner e ming th
I, the undersigned holding a valid commission the State or Province of <u>California</u> , and employ <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>12,16,966</u> to <u>06,099</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspect examinations and corrective measures describ employer shall be liable in any manner for any	oved by <u>Arkwright Mutu</u> components described in <u>27</u> , and state that to tive measures described in or nor his employer makes	this Ov the bes this Ov any wa	wner's Rep st of my kn wner's Rep arranty, exp	ort during the period owledge and belief, the ( ort in accordance with the pressed or implied, conce ither the Inspector nor hi	Owner e ming th
I, the undersigned holding a valid commission the State or Province of <u>California</u> and emplo <u>Waltham, Massachusetts</u> have inspected the <u>12/10/9/0</u> to <u>010/09/0</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspect	oyed by <u>Arkwright Mutu</u> components described in <u>2</u> , and state that to tive measures described in or nor his employer makes bed in this Owner's Report. y personal injury or proper	any war Furth	wner's Rep st of my kn wner's Rep arranty, exp ermore, ne age or a lo	ort during the period owledge and belief, the ( ort in accordance with the pressed or implied, conce ither the Inspector nor hi as of any kind arising from	Owner e ming th
I, the undersigned holding a valid commission the State or Province of <u>California</u> , and employ <u>Waltham</u> , <u>Massachusetts</u> have inspected the <u>12,16,966</u> to <u>06,099</u> has performed examinations and taken correct requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspect examinations and corrective measures describ employer shall be liable in any manner for any	oyed by <u>Arkwright Mutu</u> components described in <u>27</u> , and state that to tive measures described in or nor his employer makes bed in this Owner's Report y personal injury or proper	any war Furth ty dam	wner's Rep st of my kn wner's Rep arranty, exp ermore, ne age or a lo	ort during the period owledge and belief, the ( ort in accordance with the pressed or implied, conce ither the Inspector nor hi	Owner e rning th s n or



As Required by the Provisions of the ASME Code SectionXI

- Unit: 2 Owner: Southern California Edison Company 1... 2244 Walnut Grove Avenue 96101220000 MO: Rosemead, California 91770 Rspec: 073-96 P&ID: 40112A (C4) 2 Plant San Onofre Nuclear Generating Station S2-1204-21 & 34 N-5: San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company N/A Authorization No: Expiration Date: N/A Identification of System: Safety Injection and Shutdown Cooling 4
  - 5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1971 Edition, Winter 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
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 m port 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's designee and the ALA.



and the second secon	CERTIFICATE OF CO	MPLIANCE	
	CERTIFICATE OF CC	INT FRANCE	
Ve certify that the statements made in the n f the ASME Code, Section XI.	eport are correct and this	replacement con repair or replacement	nforms to the rules
ype Code Symbol Stamp: N/A			
Signed: <u>Owner or Owner's Designee</u> , Title	Expiration Da	ate: N/A Engineer Date:	5/13/37
	CERTIFICATE OF INS	PECTION	
, the undersigned holding a valid commiss he State or Province of <u>California</u> , and en	aployed by Arkwright M	lutual Insurance (	Company of
he State or Province of <u>California</u> , and en Waltham, Massachusetts have inspected	hployed by <u>Arkwright M</u> the components describe 197, and state th rective measures describe	Lutual Insurance ( ad in this Owner's R at to the best of my	<u>Company</u> of eport during the period knowledge and belief, the Owner
he State or Province of <u>California</u> , and en Waltham, <u>Massachusetts</u> have inspected <u>10/22/96</u> to <u>05/14</u> has performed examinations and taken com	nployed by <u>Arkwright M</u> the components describe <u>497</u> , and state th rective measures describe XI. ector nor his employer ma cribed in this Owner's Re	Iutual Insurance ( ad in this Owner's R at to the best of my ad in this Owner's R akes any warranty, e port. Furthermore,	<u>Company</u> of eport during the period knowledge and belief, the Owner eport in accordance with the expressed or implied, concerning the neither the Inspector nor his
he State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>10/22/9</u> to <u>15/10</u> to	nployed by <u>Arkwright M</u> the components describe <u>197</u> , and state th rective measures describe XI. ector nor his employer ma cribed in this Owner's Re any personal injury or pro	Iutual Insurance ( ad in this Owner's R at to the best of my ad in this Owner's R akes any warranty, e port. Furthermore, operty damage or a	<u>Company</u> of eport during the period knowledge and belief, the Owner eport in accordance with the expressed or implied, concerning the neither the Inspector nor his
he State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>10/22/9</u> to <u>15/10</u> to	nployed by <u>Arkwright M</u> the components describe <u>97</u> , and state th rective measures describe XI. ector nor his employer ma cribed in this Owner's Re- any personal injury or pro- <u>Commissions</u>	Lutual Insurance ( ad in this Owner's R at to the best of my ad in this Owner's R akes any warranty, e port. Furthermore, operty damage or a	<u>Company</u> of eport during the period knowledge and belief, the Owner eport in accordance with the expressed or implied, concerning the neither the Inspector nor his loss of any kind arising from or

4	As Required	by the	Provisions	of the	ASME	Code	Section XI	

1.	Owner:	Southern California Edison Company	Unit:	2
		2244 Walnut Grove Avenue Rosemead, California 91770	MO:	96101374000 96110459000 96110999000 96110999001 97010946000
2	Plant:	San Onofre Nuclear Generating Station		076-96 R1,011-97, ASME XI DATA-0077
		San Clemente, California 92674-0128	P&ID: N-5:	40141A (C7) S2-1305-7
3.	Work Pe	rformed by: Southern California Edison Company		Code Symbol Stamp: N/A
4.	Identific	cation of System: Main Steam		ization No: N/A tion Date: N/A

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

6.	Identification of	Components	Repaired o	Replaced	and Re	placement	Components
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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	Anchot/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: Machinged 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: <u>System Functional Pressure Test</u> See: AR 950300014-8 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 shorts is recorded at the top of this form, and (4) each sheet is nutaled and dated by the Owner or Owner's designee and the ALA.

9. Remarks : CR-2001-93 reconciles the replacement auts which were certified to ASME III, Class 2, 1989 Edition, No Addenda.

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CERTIFICATE	OF COMPLIANCE
e certify that the statements made in the report are correct as the ASME Code, Section XI.	nd this repair and replacement conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
ertificate of Authorization No: N/A Expirat	tion Date: N/A
igned: <u>Owner or Owner's Designee</u> , Title	Codes Engineer Date: C/2/97
CERTIFICATE	OF INSPECTION
the undersigned holding a valid commission issued by the h	National Board of Boiler and Pressure Vessel Inspectors and
be State or Province of <u>California</u> , and employed by <u>Arkwr</u> Valtham, <u>Massachusetts</u> have inspected the components d <u>12/02/96</u> to <u>00/09/97</u> , and t as performed examinations and taken corrective measures d	right Mutual Insurance Company of described in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner
the State or Province of <u>California</u> , and employed by <u>Arkwr</u> Valtham, <u>Massachusetts</u> have inspected the components d and the province of th	right Mutual Insurance Company of described in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner
be State or Province of <u>California</u> , and employed by <u>Arkwr</u> Valtham, <u>Massachusetts</u> have inspected the components d <u>12/02/96</u> to <u>06/09/97</u> , and t as performed examinations and taken corrective measures d equirements of the ASME Code, Section XI.	right Mutual Insurance Company of described in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner described in this Owner's Report in accordance with the loyer makes any warranty, expressed or implied, concerning th her's Report. Furthermore, neither the Inspector nor his
he State or Province of <u>California</u> , and employed by <u>Arkwr</u> <u>Valtham</u> , <u>Massachusetts</u> have inspected the components d <u>Massachusetts</u> to <u>Massachusetts</u> and is as performed examinations and taken corrective measures d equirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Own employer shall be liable in any manner for any personal injur- connected with this inspection.	right Mutual Insurance Company of described in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner described in this Owner's Report in accordance with the loyer makes any warranty, expressed or implied, concerning th her's Report. Furthermore, neither the Inspector nor his
be State or Province of <u>California</u> , and employed by <u>Arkwr</u> <u>Valtham</u> , <u>Massachusetts</u> have inspected the components d <u>Massachusetts</u> have inspected the components d is performed examinations and taken corrective measures d equirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employ examinations and corrective measures described in this Own employer shall be liable in any manner for any personal injur- connected with this inspection.	right Mutual Insurance Company of lescribed in this Owner's Report during the period state that to the best of my knowledge and belief, the Owner lescribed in this Owner's Report in accordance with the loyer makes any warranty, expressed or implied, concerning th her's Report. Furthermore, neither the Inspector nor his ry or property damage or a loss of any kind arising from or ons 1862 California

As Required by the Provisions of the ASME Code Section XI

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

Sheet | of ]

Type Code Symbol Starnp: 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-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: <u>System Inservice Pressure Test</u> See: AR 961100993-13

Pressure: NOP

Temp: N/A

NOTE Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 81.2 in x (1) in. (2) information in Items 1 through o 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 vibaled and dated by the Owner or Owner's designee and the ALA.

CERTERORIE OF	COMPLIANCE
Ve certify that the statements made in the report are correct and the ASME Code, Section XI.	nis replacement conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	승규는 것 같은 것 같은 것 같은 것 같이 많이 없다.
Sertificate of Authorization No: N/A Expiration Signed: Mailly Supervising ASME Code Owner or Owner's Designee, Title	11.7
CERTIFICATE OF I	NSPECTION
he State or Province of <u>California</u> , and employed by <u>Arkwright</u> Waltham, <u>Massachusetts</u> have inspected the components descr	ibed in this Owner's Report during the period
Waltham Massachusetts have inspected the components descr <u>12/02/96</u> to <u>044/1/97</u> , and state has performed examinations and taken corrective measures descr requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or connected with this inspection.	Mutual Insurance Company of ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ibed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning the Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or
Waltham, Massachusetts have inspected the components descr <u>12/02/96</u> to <u>04/11/97</u> , and state has performed examinations and taken corrective measures descr requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or	Mutual Insurance Company of ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ibed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning the Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or

As Required by the Provisions of the ASME Code SectionXI

- Owner: Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770
- 2. Plant: San Onofre Nuclear Generating Station San Clemente, California 92674-0128
- Work Performed by: Bechtel Construction Company P. O. Box + 50 San Clemr nte, CA 92674-0128

Sheet 1 of 1 Unit: 2 CWO: 96101530000 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 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 Io. rtification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" 8N-2B Manway Stud Nut (1)	ABB Combustion Engineering	Hi.# J6765-1		RSO-3440 85, SA193 Gr.Ľ7	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 perf \* med on the replacement nut with satisfactory results.

8. Tests Conducted System Inservice Pressure Test See: AR 961100993-12 Pressure: NOP

Temp: N/A

266. AK 901100993-12

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8.1-2 in x.11 m., (2) information in litems 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 designed and the ALA.

	(Applicable Manufacturer's Data Reports are available on-sate)
	CERTIFICATE OF COMPLIANCE
Ve certify that the statements made in the re f the ASME Code, Section XI.	repair or replacement conforms to the rules
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Owner or Owner's Designee</u> , Title	pervising ASME Codes Engineer Date: 4/10/97
	CERTIFICATE OF INSPECTION
	ployed by Arkwright Mutual Insurance Company of
Walt tam. Massachusetts have inspected to 1.2/02/96 to 04/11/	the component described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the
Walt tam. Massachusetts have inspected to <u>044/11</u> has periormed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspect examinations and corrective measures descri	the component described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the
Walt tam, Massachusetts have inspected to 1.2/02/96 to 04/11/ has peri timed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspec- examinations and corrective measures descri- employer shall be liable in any manner for a connected with this inspection.	the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the GL ector nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1862</u> <u>California</u>
Walt tam. Massachusetts have inspected to 1.2/0.2/96 to 0.44/1/ has peri vined examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspec- examinations and corrective measures descr employer shall be liable in any manner for a	the components described in this Owner's Report during the period 97, and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the GL ector nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 96111540000 GEN-151	
2.	Plant	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40134A (G6) S2-1212-5	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identific	cation of System: Nuclear Plant Sampling	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1-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 1/4-4	Pacific Scientific	14458	N/A	S2-SS-031-H-008	1980	a 194	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 lass, sketches, or drawings may be used provided (1) size is 8 1/2 us, 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 sutualed and dated by the Owner's designee and the ALA.



 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 Date: 5/13/47 Supervising ASME Codes Engineer Signed: 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 to 05/15/97, and state that to the best of my knowledge and belief, the Owner 12/19/9/0 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. Commissions 1862 Thompson California Inspector's Signature National Board, State, Province, and Endorsements Date May 15, 1997

As Required by the Provisions of the ASME Code SectionXI

	Owner: Plant:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770 San Onofre Nuclear Generating Station San Clemente, California 92674-0128	Unit: 2 MO: 96111591000 Rspec: ASME SECTION XI DATA-0288 P&ID: 40191E (B6) N-5: S2-2423-1
3.	Work Pe	erformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A
4.	Identifi	cation of System: Compressed Service Air	Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition Summer 1975 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
2" 600# Gate Valve	Henry Vogt Machine	513-214605	N/A	S22423MU055	1977	0.00	Yes
Bonnet	Henry Vogt Machine	R3871A	N/A	RSO-2414-85, SA105	1985	Replacement	No



#### 7. Description of Work:

Replaced valve bonnet with an in-kind replacement to correct seat leakage.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 961100798-3 Pressure NOP

Temp: N/A

NOTE: Supplemental sheets in the form of lasts, 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 installed and dated by the Owner or Owner's designee and the AIA.

		s are available consite)	
	CERTIFICATE OF CO	MPLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	e report are correct and this	replacement confo repair or replacement	orms to the rules
Type Code Symbol Stamp: N/A			
Signed: <u>Authopization No:</u> N/A Owner or Owner's Designee, Titl	Expiration Dat Supervising ASME Codes E le		5/12/47
	CERTIFICATE OF INSP	ECTION	
Waltham, Massachusetts have inspecte	2/97 and state the	to the hest of my lon	an among me period
12/02/96 to 05/13 has performed examinations and taken co requirements of the ASME Code, Section	ofrective measures described n XI.	in this Owner's Rep	ort in accordance with the
has performed examinations and taken co	ofrective measures described n XI. spector nor his employer mail escribed in this Owner's Rep	in this Owner's Report tes any warranty, exp ort. Furthermore, nei	ressed or implied, concerning the ther the Inspector nor his
has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Ins examinations and corrective measures de employer shall be liable in any manner for	ofrective measures described n XI. spector nor his employer mail escribed in this Owner's Rep	in this Owner's Report tes any warranty, exp port. Furthermore, nei perty damage or a los	ressed or implied, concerning the ther the Inspector nor his

#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code SectionXI

		The second	The second se	and the second se	100
Owner:	Southern California Edison Company	Sheet 1 of 1 Unit:	2		
	2244 Walnut Grove Avenue	AR:	961201146		
	Rosernead, California 91770	FCN:	F12535M		
		Rspec:	N/A		
2. Plani:	San Onofre Nuclear Generating Station	P&ID:	40114D (R13)	)	
	San Clemente, California 92674-0128	N-5:	S2-1204-24, S	52-1219-4	
3. Work P	erformed by: Southern California Edison Company	Туре С	ode Symbol Su	amp: N/A	
		Author	ization No:	N/A	
4. Identifi	cation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A	

<sup>5. (</sup>a) Applicable Construction Code: ASME Section III, Class 3, 1974 Edition Summer 1974 Addenda (S21204 Lines); Class 2, 1974 Edition Summer 1974 Addenda (S21219 Line); 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
Piping	Pullman Inc.	See N5 Data Report	N/A	S21204MIL080	1976- 1980		Yes
Piping	Puliman 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	S21204ML.180	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 See: AR 961201146-1

Temp: N/A



Supplemental sheets in the form of bats, sketches, or drawings may be used provided (1) size is 8 4/2 in x 11 m., (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. NOTE

(Applicable Manufacturer's Data Reports ver 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 Date: 6/9/97 Supervising ASME Codes Engineer Signed Owner or Owner's Designee, Title CERTIFICATE OF INSPECTION 1, 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 to 6/10/97, and state that to the best of my knowledge and belief, the Owner 6/10/97 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 18/2 Commissions \_ California National Board, State, Province, and Endorsements Date

		As Required by the Provisions of the ASME Code	Section XI
1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Skeet 1 of 1 Unit: 2 MO: 96120495000 FCN: F12771M
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	Rspec: 113-96 P&ID: 40111A (E6) N-5: S2-1201-3
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A
4.	Identific	ation of System: Reactor Coolant	Expiration Date: N/A

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: <u>System Leakage Pressure Test</u> See: <u>AR 961101116-8</u> Pres: NOP

Temp: N/A

NOTE. Supplemental sheets in the form of asts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (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 subaled and dated by the Owner or Owner's designee and the ALA.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the rep f the ASME Code, Section XI.	port are correct and this replacement conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Ullei lul</u> Supe Owner or Owner's Designee, Title	ervising ASME Codes Engineer Date: 6/8/97
	CERTIFICATE OF INSPECTION
the State or Province of <u>California</u> , and emp Valtham, <u>Massachusetts</u> have inspected the 12/16/96 to <u>X6/09</u>	in issued by the National Board of Boiler and Pressure Vessel Inspectors and bloyed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner
he State or Province of <u>California</u> , and emp <u>Waltham, Massachusetts</u> have inspected th <u>12716796</u> to <u>02077</u> has performed examinations and taken correct equirements of the ASME Code, Section XI By signing this certificate, neither the Inspect examinations and corrective measures descri- employer shall be liable in any manner for an	bloyed by Arkwright Mutual Insurance Company of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ctive measures described in this Owner's Report in accordance with the
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected th <u>Massachusetts</u> have inspected th to <u>Massachusetts</u> have inspected th the spectrum of the ASME Code, Section XI By signing this certificate, neither the Inspect examinations and corrective measures descri- employer shall be liable in any manner for an	bloyed by Arkwright Mutual Insurance Company of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ctive measures described in this Owner's Report in accordance with the I. stor nor his employer makes any warranty, expressed or implied, concerning the ibed in this Owner's Report. Furthermore, neither the Inspector nor his my personal injury or property damage or a loss of any kind arising from or
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected th <u>12116796</u> to <u>No109</u> has performed examinations and taken correct requirements of the ASME Code, Section XI By signing this certificate, neither the Inspect examinations and corrective measures descri	bloyed by Arkwright Mutual Insurance Company of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ctive measures described in this Owner's Report in accordance with the I. stor nor his employer makes any warranty, expressed or implied, concerning the ibed in this Owner's Report. Furthermore, neither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: 2 MO: 96120339000 Rspec: 116-96 R1,	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: 40124A (H6) N-5: S2-1208-11	
3.	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A	
4.	Identific	ation of System: Chemical and Volume Control	Expiration Date: N/A	

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Add ada; 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	Manufecturer Serial No.	Natio al Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3" 150# Flow Diverting Valve (BW)	Hammel-Dahl Conotlow	74/5797/018	N/A	2LV0227A	1977	Repaired	Yes

7. Description of Work:

The tack welds on the value 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 m. x 11 m., (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.



	(Applicable Manufacurrer's Data Reports are available ch-sate)
	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the ASME Code, Section XI.	repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Owner or Owner's Designee</u> , T	Supervising ASME Codes Engineer Date: 6/11/97
And and the second state of the	
the State or Province of <u>California</u> , an Waltham, <u>Massachusetts</u> have inspe	CERTIFICATE OF INSPECTION mission issued by the National Board of Boiler and Pressure Vessel Inspectors and d employed by <u>Arkwright Mutual Insurance Company</u> of ted the components described in this Owner's Report during the period 1/97, and state that to the best of my knowledge and belief, the Owner
the State or Province of <u>California</u> , an <u>Waltham</u> . <u>Massachusetts</u> have inspec- <u>01/0/197</u> to <u>0/6</u> has performed examinations and taken requirements of the ASME Code, Section By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	hission issued by the National Board of Boiler and Pressure Vessel Inspectors and demployed by <u>Arkwright Mutual Insurance Company</u> of the the components described in this Owner's Report during the period 1/9.7, and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the on XI. Inspector nor his employer makes any warranty, expressed or implied, concerning the described in this Owner's Report. Furthermore, neither the Inspector nor his for any personal injury or property damage or a loss of any kind arising from or
he State or Province of <u>California</u> , an <u>Waltham. Massachusetts</u> have inspe- <u>01101197</u> to <u>016</u> has performed examinations and taken requirements of the ASME Code, Secti By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner	hission issued by the National Board of Boiler and Pressure Vessel Inspectors and demployed by <u>Arkwright Mutual Insurance Company</u> of the the components described in this Owner's Report during the period <u>1/97</u> , and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the on XI.

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As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96120496000	
		Rosemead, California 91770	Rspec:	114-96	
			P&ID:	40111A (G7)	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	\$2-1201-3	
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Sta	N/A
4	Identifi	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

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- 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: <u>System Leakage Pressure Test</u> See: AR 961101101-10 Pressure: NOP

Temp: N/A

NOTE: Supplemental sheets in the form of lasts, 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 thus form, and (4) each sheet is initialed and dated by the Owner's designee and the ALA.

9. Remarks : None.

	Reports are available on ante)
CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct and t f the ASME Code, Section XI.	his <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	요즘 아이는 것은 것 같아요. 같아요.
Signed: <u>Authorization No: N/A</u> Signed: <u>Multill Supervising ASME Code</u> Owner or Owner's Designee, Title	Date: N/A es Engineer Date: 6/8/97
CERTIFICATE OF I	
the undersigned holding a valid commission issued by the National State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components described by <u>Arkwrigh</u> , and state <u>12/17/96</u> to <u>06/09/97</u> , and state thas performed examinations and taken corrective measures described by the ASME Code, Section XI.	t Mutual Insurance Company of ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner
By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's	makes any warranty, expressed or implied, concerning the
employer shall be liable in any manner for any personal injury or connected with this inspection.	property damage or a loss of any kind arising from or
	property damage or a loss of any kind arising from or

As Required by the Provisions of the ASME Code Section XI	
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1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Sheet 1 of 1 Unit: 2 MO: 96120497000 FCN: F12771M
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, Californ674-0128	Rspec: 115-96 P&ID: 40111A (C7) N-5: S2-1201-3
3	Work Pe	rformed by: Southern California Edison Company	Type Code Symbol Stamp: N/A Authorization No: N/A
4.	Identific	ation of System: Reactor Coolant	Expiration Date: N/A

- 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  $8 i/2 m \times 11 m$ , (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 moorded at the top of this form, and (4) each sheet is initialed and dated by the Owner's designer and the ALA.

9. Remarks : None.

	CERTIFICATE OF CO	MPLIANCE.	
Ve certify that the statements made in the re f the ASME Code, Section XI.	eport are correct and this	replacement con repair or replacement	forms to the rules
ype Code Symbol Stamp: N/A			
Signed: <u>Owner or Owner's Designee</u> , Title	Expiration Dat		6/8/97
	CERTIFICATE OF INS	PECTION	
he State or Province of <u>California</u> , and en	aployed by Arkwright M	d in this Owner's Re	ompany of port during the period
I, the undersigned holding a valid commiss the State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>12/17/96</u> to <u>06/09</u> has performed examinations and taken com requirements of the ASME Code, Section 2	the components described 97, and state the rective measures described	<b>utual Insurance C</b> d in this Owner's Re at to the best of my k	ompany of port during the period nowledge and belief, the Owner
he State or Province of <u>California</u> , and en Waltham, Massachusetts have inspected <u>12/17/96</u> to <u>06/09</u> has performed examinations and taken com	hereight by <u>Arkwright M</u> the components describes (1977), and state the rective measures describes XI. ector nor his employer ma cribed in this Owner's Ret	d in this Owner's Re at to the best of my k d in this Owner's Re ukes any warranty, ex port. Furthermore, r	ompany of port during the period nowledge and belief, the Owner port in accordance with the spressed or implied, concerning the wither the Inspector nor his
he State or Province of <u>California</u> , and en <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>D2/17/96</u> to <u>06/09</u> has performed examinations and taken com requirements of the ASME Code, Section 1 By signing this certificate, neither the Inspectations examinations and corrective measures desc employer shall be liable in any manner for	Arkwright M the components described (977), and state that rective measures described XI. ector nor his employer matching any personal injury or pro- Commissions	d in this Owner's Re at to the best of my k d in this Owner's Re kes any warranty, en port. Furthermore, r operty damage or a h	ompany of port during the period nowledge and belief, the Owner port in accordance with the spressed or implied, concerning the wither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	96120548000		
		Rosemead, California 91770	Rspec:	GEN-140		
			P&ID:	40111B		
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		S2-1201-2		
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A	
4.	Identific	cation of System: Reactor Coolant	Expirat	tion Date:	N/A	

5. (a) Applicable Construction Code: ASME Section III. Class 1, 1971 Edition, Summer 1971 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
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 N 1t (1)	EG&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

Fressure: N/A

Temp: N/A



NOTE: Supplemental shoets in the form of lasts, sketches, or drawings may be used provided ( ) size is 8 1/2 m. x 11 m., (2) information in lisms 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 Ow. or Owner's duringnee and the ALA.

9. Remarks : CR-3007-94 (stud) and CR-2001-93 (nut) reconciles the replacement stud and nut which were certified to A SME III, Class 1, any Year/Addenda from Summer 1971 Addenda through 1989 Edition, No Addenda.

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

CERTIFICATE OF	
e certify that the statements made in the report are correct and the ASME Code, Section XI.	replacement conforms to the rules
pe Code Symbol Stamp: N/A	
ertificate of Authorization No: N/A Expiration	Date: N/A
igned: <u>Gir Mailet</u> Supervising ASME Code Owner or Owner's Designee, Title	es Engineer Date: 1/20/97
CERTIFICATE OF I	NSPECTION
he State or Province of <u>California</u> , and employed by <u>Arkwrigh</u>	ibed in this Owner's Report during the period
e State or Province of California, and employed by Arkwright	t Mutual Insurance Company of ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ibed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning to Report. Furthermore, neither the Inspector nor his
The State or Province of <u>California</u> , and employed by <u>Arkwright</u> <u>Valtham</u> , <u>Massachusetts</u> have inspected the components descr <u>12/12/96</u> to <u>01/21/97</u> , and state was performed examinations and taken corrective measures descr equirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or	t Mutual Insurance Company of ibed in this Owner's Report during the period that to the best of my knowledge and belief, the Owner ibed in this Owner's Report in accordance with the makes any warranty, expressed or implied, concerning to Report. Furthermore, neither the Inspector nor his property damage or a loss of any kind arising from or

FORM NIS-2	<b>OWNER'S</b>	REPORT	FOR	REPAIRS	OR	REPLACEMENTS	
		and the second sec					

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	MO:	2 96120605000 GEN-150	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID	40141D \$3-1301-1	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A
4.	Identific	ation of System: Main Steam	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III. Class 2-NF, 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 are aired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	Nationai 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 litms 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's designee and the ALA.

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

	CERTIFICATE OF CO	MPLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this	replacement repair or replacem	conforms to the rules ent
ype Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Da	ate: N/A	
Signed Owner or Owner's Designee, Title	upervising ASME Codes I t	Engineer Da	ite: 5/13/97
an and a second seco	CERTIFICATE OF INS	PECTION	
he State or Province of California, and e	mployed by Arkwright N	Iutual Insuranc	e Company of
he State or Province of <u>California</u> , and e Waltham, <u>Massachusetts</u> have inspecte <u>12/18/96</u> to <u>05/14/</u> has performed examinations and taken co	mployed by <u>Arkwright M</u> d the components describe <u>197</u> , and state th rrective measures describe	<b>Iutual Insuranc</b> ed in this Owner's at to the best of n	e Company of Report during the period my knowledge and belief, the Owner
, the undersigned holding a valid commiss the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>12/18/96</u> to <u>05/14/</u> to <u>05/14/</u> to <u>05/14/</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures det employer shall be liable in any manner fo connected with this inspection.	mployed by <u>Arkwright M</u> d the components describe <u>197</u> , and state th rrective measures describe XI. pector nor his employer ma scribed in this Owner's Re	futual Insurance ed in this Owner's at to the best of n ed in this Owner's akes any warranty port. Furthermor	e Company of Report during the period my knowledge and belief, the Owner Report in accordance with the y, expressed or implied, concerning the re, neither the Inspector nor his
he State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte to <u>D5/14/</u> to <u>D5/14/</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures det employer shall be liable in any manner fo	mployed by <u>Arkwright M</u> d the components describe <u>97</u> , and state the rrective measures describe XI. pector nor his employer mascribed in this Owner's Re- r any personal injury or pro- <u>Commissions</u>	d in this Owner's at to the best of n at in this Owner's akes any warranty port. Furthermor operty damage or 1862	e Company of Report during the period my knowledge and belief, the Owner Report in accordance with the y, expressed or implied, concerning the re, neither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	MO:	2 96120743000 GEN-150	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40111C (G2) S2-1212-9	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identific	ation of System: Nuclear Plant Sampling	Expirat	tion Date:	N/A

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.	Othe: Identification	Year Built	Replace or Replace or	TME Coole Salor d Ye No
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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 ir. x 11 ir., (2) informs ion 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) isch sheet is inutialed and drud by the Owner or Owner's designee and the ALA.

9. Remarks : The replacement snubber was certified to ASME III-1-NF as allowed by ASME III, paragraph NCA-2134.

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(Applacable)	Manufacturer's	Dess Reports	BIT BYSMALME OF	-arie

	CERTIFICATE OF CO	MPLIANCE		and and modeline had a specific specifi
We certify that the statements made in the r of the ASME Code, Section XI.	eport are correct and this	replacement of		rules
Type Code Symbol `tamp: N/A				
Certificate of Authorization No: N/A Signed: <u>Multiple Sur</u> Owner or Owner's Designee, Title	Expiration Da		e:	197
				AND ADDRESS ADDR
I, the undersigned holding a valid commissi the State or Province of <u>California</u> , and en	ployed by Arkwright M	Board of Boiler utual Insurance	Company of	
he State or Province of California, and em Waltham, Massachusetts have inspected 12/22/916 to 05/15 has performed examinations and taken corr requirements of the ASN 2006, Section 3 By signing this certificate, neither the Inspe	ton issued by the National aployed by <u>Arkwright M</u> the components describes $\frac{297}{2}$ , and state the ective measures describes 1.	Board of Boiler utual Insurance d in this Owner's t to the best of m d in this Owner's kes any warranty,	<u>Company</u> of Report during t y knowledge an Report in accor	he period d belief, the Owner dance with the nplied, concerning t
the State or Province of <u>California</u> , and en Waltham, <u>Massachusetts</u> have inspected	ton issued by the National aployed by <u>Arkwright M</u> the components describe <u>297</u> , and state the ective measures describes I. ector nor his employer ma ribed in this Owner's Rep	Board of Boiler <u>utual Insurance</u> d in this Owner's t to the best of m d in this Owner's kes any warranty, ort. Furthermore	<u>Company</u> of Report during t y knowledge an Report in accor	he period d belief, the Owner dance with the nplied, concerning t spector nor his
the State or Province of <u>California</u> and em <u>Waltham</u> , <u>Massachusetts</u> have inspected <u>12/22/96</u> to <u>05/15</u> has performed examinations and taken corr requirements of the ASN _ lode, Section 3 By signing this certificate, neither the Inspe examinations and corrective measures desc employer shall be liable in any manner for a	ton issued by the National aployed by <u>Arkwright M</u> the components describe <u>297</u> , and state the ective measures describes I. ector nor his employer ma ribed in this Owner's Rep	Board of Boiler utual Insurance d in this Owner's it to the best of m d in this Owner's kes any warranty, ort. Furthermore perty damage or i	<u>Company</u> of Report during t y knowledge an Report in accor	he period d belief, the Owner dance with the nplied, concerning t spector nor his ad arising from or

As Require t by the Provisions of the ASME Code Section.30

1	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96120819000	
		Rosemead, California 91770	Rspec	GEN-156	
	1		P&ID:	40111A	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1201-3	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identifie	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition Summer 1971 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	Minur atturer Social No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Starnped 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 tubeplugging 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 skeets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 m., (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.

	Account of the second
그렇는 김 야가 한다. 그는 것	CERTIFICATE OF COMPLIANCE
We certify that the statements made in t of the ASME Code, Section XI.	he report are correct and this <u>repair and replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>My My all</u> Owner or Owner's Designee, Ti	Supervising ASME Codes Engineer Date: 6/8/97
	CERTIFICATE OF INSPECTION
Valtham, Massachusetts have inspect	ission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period 29/97, and state that to the best of my knowledge and belief, the Owner
Valtham, Massachusetts have inspect 0///5/97 to 06/1 as performed examinations and taken c equirements of the ASME Code, Section by signing this certificate, neither the Ins- xaminations and corrective measures do	ed the components described in this Owner's Report during the period 29/97, and state that to the best of my knowledge and belief, the Owner
Waltham, Massachusetts have inspect O///5/97 to	ed the components described in this Owner's Report during the period 29/97, and state that to the best of my knowledge and belief, the Owner orrective measures described in this Owner's Report in accordance with the n XI. spector nor his employer makes any warranty, expressed or implied, concerning the escribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or Commissions 1762 California
Waltham, Massachusetts have inspect 01115/97 to 06/1 ias performed examinations and taken c equirements of the ASME Code, Section By signing this certificate, neither the Ins- xaminations and corrective measures do	ed the components described in this Owner's Report during the period 2997, and state that to the best of my knowledge and belief, the Owner contective measures described in this Owner's Report in accordance with the n XI. spector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or

As Required by the Provisions of the ASME Code Section/C

-1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	MO:	2 96120863000 GEN-107	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: N-5:	40111A (E5) N/A	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identific	ation of System CLUNI Control	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Winter 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
CEDM Vent Ball Seal	ABB Combustion Engineering	1370-164	N/A	S21104CEDM #36	1978	***	Yes
Vent Stem	ABB Combustion Engineering	S/N 406, Ht. #36101	N/A	RSO-1974-92, SA479 Tp.316	N/A	Replacement	No

7. Description of Work:

Replaced the vent stem on the Vent Ball Seal of Control Element Drive Mechanism #36 with an in-kind replacement.

8 Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 961100993-10 Pressure: NOP

Temp: N/A



NOTE: Supplemental sheets in the form of last, 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.

CERTIFICATE OF	COMPLIANCE		
ve certify that the statements made in the report are correct and t f the ASME Code, Section XI.	nis <u>replacement</u> or repair or replacement	conforms to the rules ent	
ype Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A Expiration	Date: N/A		
Owner or Owner's Designee, Title	<u>s Engineer</u> Da	te_5/12/97	
CERTIFICATE OF I	NEPECTION		
CENTE IONE OF A			
the undersigned holding a valid commission issued by the National State of the National State of the State of	onal Board of Boiler	and Pressure Vessel In	spectors and
the undersigned holding a valid commission issued by the National State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components descr <u>01/07/97</u> to <u>05/13/97</u> , and state has performed examinations and taken corrective measures described.	onal Board of Boiler t <u>Mutual Insuranc</u> ibed in this Owner's that to the best of m	<u>e Company</u> of Report during the perio ny knowledge and belie	od f, the Owner
the undersigned holding a valid commission issued by the National State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components described the components described the components described in the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or	mal Board of Boiler t <u>Mutual Insurance</u> ibed in this Owner's that to the best of m ibed in this Owner's makes any warranty Report. Furthermor	e Company of Report during the period by knowledge and belie Report in accordance w , expressed or implied, e, neither the Inspector	od f, the Owner vith the concerning the nor his
, the undersigned holding a valid commission issued by the National State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham, <u>Massachusetts</u> have inspected the components described in a performed examinations and taken corrective measures described in the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or connected with this inspection.	mal Board of Boiler <u>Mutual Insurance</u> ibed in this Owner's that to the best of m ibed in this Owner's makes any warranty Report. Furthermor property damage or	e Company of Report during the period by knowledge and belie Report in accordance w , expressed or implied, e, neither the Inspector	od f, the Owner vith the concerning the nor his
the undersigned holding a valid commission issued by the National State or Province of <u>California</u> , and employed by <u>Arkwrigh</u> Waltham. <u>Massachusetts</u> have inspected the components described the components described the components described in the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer examinations and corrective measures described in this Owner's employer shall be liable in any manner for any personal injury or	mal Board of Boiler Mutual Insurance ibed in this Owner's that to the best of m ibed in this Owner's makes any warranty Report. Furthermor property damage or	e Company of Report during the period by knowledge and belie: Report in accordance w w, expressed or implied, e, neither the Inspector a loss of any kind arisin	od f, the Owner vith the concerning the nor his ng from or



As Required by the Provisions of the ASME Code SectionXC

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 96120875000 GEN-107	
2.	Plant	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID: N-5:	40111A (E5) N/A	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A
4.	Identific	cation of System: CEDM Control	Expirat	ion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Winter 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
CEDM Vent Ball Seal	ABB Combustion Engineering	1370-133	N/A	S21104CEDM #69	1978	***	Yes
Housing Nut	ABB Combustion Engineering	S/N 408, Ht. #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: <u>System Leakage Pressure Test</u> See: AR 961200914-3 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 ALA.

9. Remarks None.

	Collection of the second of th	ers Data Reports are available on-site)
an a	CERTIFICATI	E OF COMPLIANCE
We certify that the statemen of the ASME Code, Section	ts made in the report are correct XI.	and this <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp:	N/A	
Signed: Owner or Owner's 1	lec Supervising ASME	Codes Engineer Date: <u>5/12/97</u>
he State or Province of <u>Ca</u> Waltham, Massachusetts	valid commission issued by the lifornia, and employed by <u>Arkw</u> have inspected the components 0 05/43/97, and	OF INSPECTION National Board of Boiler and Pressure Vessel Inspectors and <u>wright Mutual Insurance Company</u> of described in this Owner's Report during the period d state that to the best of my knowledge and belief, the Owner described in this Owner's Report in accordance with the
requirements of the ASME	Code, Section XI. neither the Inspector nor his emp	loyer makes any warranty, expressed or implied, concerning the ner's Report. Furthermore, neither the Inspector nor his
examinations and corrective	any manner for any personal inju	ry or property damage or a loss of any kind arising from or

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	96121415001	
		Rosemead, California 91770	Rspec:	002-97	
			P&ID:	40111B (F);	
2.	Plant	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1201-3	
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A
4	Identifi	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III. Ciass 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 Buih	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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 m. x 11 m., (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.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the ASME Code, Section XI.	the report are correct and this <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: Multi- Owner or Owner's Designee, Ti	Supervising ASME Codes Engineer Date: 5/12/97
ana an ann a san a' an ann a' an ann an an ann an an an an an an an a	CERTIFICATE OF INSPECTION
he State or Frovince of California, and	ission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by Arkwright Mutual Insurance Company of
the State or Frovince of <u>California</u> , and Waltham, <u>Massachusetts</u> have inspect <u>01/24/97</u> to <u>05//</u> to <u>05//</u> has performed examinations and taken of requirements of the ASME Code, Section By signing this certificate, neither the In examinations and corrective measures d	ission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of ted the components described in this Owner's Report during the period 3/97, and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the

As Required by the Provisions of the ASME Code Section XI

1	s,	Owner:	Southern California Edison Company	Unit:	2	
			2244 Walnut Grove Avenue Rosemead, California 91770	MO: Rspec:	96121541000 GEN-150	
2	2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40141A (F7) S2-1305-8	
	3.	Work Pe	rformed by: Southern California Edison Company	Author	ode Symbol Stamp ization No:	N/A
	4.	Identific	ation of System: Main Steam	Expira	tion Date:	N/A

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	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 (VT-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 \$ 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.

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

			sports are available on-site)	
		CERTIFICATE OF	COMPLIANCE	
We certify that the s of the ASME Code,	tatements made in the rep Section XI.	port are correct and th	is <u>replacement</u> or replacement	conforms to the rules
Type Code Symbol	Stamp: N/A			
Certificate of Author	rization No: N/A	Expiration I		
Signed: Mariner of O	Supervener's Designee, Title	rvising ASME Code	Engineer Dat	e: 5/13/37
		ERTIFICATE OF IN	ISPECTION	
the State or Province Waltham, Massach 12/29/9 has performed exam	e of <u>California</u> , and emp husetts have inspected th to	loyed by <u>Arkwright</u> are components describ 27, and state ctive measures describ	Mutual Insurance bed in this Owner's that to the best of m	and Pressure Vessel Inspectors and <u>Company</u> of Report during the period y knowledge and belief, the Owner Report in accordance with the
	ficate neither the Inspec	tor nor his employer r	nakes any warranty,	expressed or implied, concerning the
examinations and co employer shall be li	prrective measures descri able in any manner for an	bed in this Owner's R	eport. Furthermore	a loss of any kind arising from or
examinations and co employer shall be li- connected with this	orrective measures descri able in any manner for an inspection.	bed in this Owner's R	eport. Furthermore property damage or a	, neither the Inspector nor his
examinations and co	orrective measures descri able in any manner for an inspection.	bed in this Owner's R by personal injury or p Commissions	eport. Furthermore property damage or p	, neither the Inspector nor his a loss of any kind arising from or

As Required by the Provisions of the ASME Code Section.X

1.	Owner	Southern California Edison Company 2244 Walnut Grove Avenue	Unit: MO:	2 96121843000		
2.	Plant:	Rosemead, California 91770 San Onofre Nuclear Generating Station San Clemente, California 92674-0128	P&ID:	123-96 40111A S2-1201-3		
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Stamp ization No:	: N/A N/A	
4	Identifi	cation of System: Reactor Coolant	Expira	tion Date:	N/A	

5. (a) Applicable Construction Code: ASME Section III, Sub-Section NF for Class 1 components, 1974 Edition Summer 1975 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
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 lasts, 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.

	CERTIFICATE OF COM	APLIANCE	
We certify that the statements made in the of the ASME Code, Section XI.	and the second se	repair conforms repair or replacement	to the rules
Type Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration Date		
Signed: Owner or Owner's Designee, Tit	Supervising ASME Codes En le	gineer Date:	1/28/97
he State or Province of California, and	employed by Arkwright Mu	Board of Boiler and itual Insurance C	ompany of
has performed examinations and taken of	ission issued by the National H employed by <u>Arkwright Mu</u> ed the components described $\sqrt{97}$ , and state that orrective measures described	Board of Boiler and tual Insurance C in this Owner's Re to the best of my k	ompany of port during the period nowledge and belief, the Owner
the State or Province of <u>California</u> , and <u>Waltham, Massachusetts</u> have inspect <u>01/02/97</u> to <u>01/29</u> has performed examinations and taken of	ission issued by the National H employed by <u>Arkwright Mu</u> ed the components described $\sqrt{97}$ , and state that orrective measures described	Board of Boiler and tual Insurance C in this Owner's Re to the best of my k	ompany of port during the period nowledge and belief, the Owner
he State or Province of <u>California</u> , and <u>Waltham, Massachusetts</u> have inspect <u>01/02,97</u> to <u>01/29</u> has performed examinations and taken o requirements of the ASME Code, Section By signing this certificate, neither the In- examinations and corrective measures de employer shall be liable in any manner for	ission issued by the National I employed by <u>Arkwright Mu</u> ed the components described <u>97</u> , and state that orrective measures described in XI. spector nor his employer mak escribed in this Owner's Repo	Board of Boiler and itual Insurance C in this Owner's Re to the best of my k in this Owner's Re es any warranty, en ort. Furthermore, n	ompany of port during the period nowledge and belief, the Owner port in accordance with the pressed or implied, concerning the either the Inspector nor his
the State or Province of <u>California</u> , and <u>Waltham</u> , <u>Massachusetts</u> have inspect 01/02/97 to 01/29	ission issued by the National H employed by <u>Arkwright Mu</u> ed the components described <u>297</u> , and state that orrective measures described in XI. spector nor his employer make escribed in this Owner's Repo or any personal injury or prop	Board of Boiler and itual Insurance C in this Owner's Re to the best of my k in this Owner's Re es any warranty, ep ort. Furthermore, n berty damage or a le	ompany of port during the period nowledge and belief, the Owner port in accordance with the pressed or implied, concerning the either the Inspector nor his
the State or Province of <u>California</u> , and <u>Waltham. Massachusetts</u> have inspect <u>01/02/97</u> to <u>01/29</u> has performed examinations and taken o requirements of the ASME Code, Sectio By signing this certificate, neither the In- examinations and corrective measures de employer shall be liable in any manner f	ission issued by the National H employed by <u>Arkwright Mu</u> ed the components described <u>97</u> , and state that orrective measures described in XI. spector nor his employer mak escribed in this Owner's Repo for any personal injury or prop	Board of Boiler and tual Insurance C in this Owner's Re to the best of my k in this Owner's Re es any warranty, ep ort. Furthermore, n berty damage or a le	ompany of port during the period nowledge and belief, the Owner port in accordance with the opressed or implied, concerning the either the Inspector nor his pass of any kind arising from or

As Required by the Provisions of the ASME Code SectionX

1.	Owner:	Southern California Edison Company	Unit	2	
		2244 Walnut Grove Avenue	MO	97010213001	
		Rosemead, California 91770	Rspec:	005-97, GEN-150	
			P&ID:	40111B (A4)	
2.	Plant	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5	S2-1212-6	
3	Work Pe	erformed by Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A
4.	Identifi	cation of System: Nuclear Plant Sampling		tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2-NF, 1974 Edition Summer 74 Addenda; Code Case: N-249-11

(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 Buitt	Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38708	N/A	S2-SS-042-H-021	1992	Replaced	No
Mechanical Snubber PSA 1/4-4	Pacific Scientific	38696	N/A	RSO-1081-92, P/N 1801104-05	N/A	Replacement	No
3/4" Pipe Clamp	Grinnell Corp.	Ht. Code A	N/A	RSO-0161-97, SA36, CC N-249- 11	N/A	Replacement	No

#### 7. Description of Work:

The mechanical snubber and the pipe clamp at Hanger position S2SS042H021 were replaced with in-kind parts. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. Reference: NCR 961202002. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A



Supplemental sheets in the form of latis, sketches, or drawings may be used provided (1) size is 8.1.2 in x.11 m., (2) information in Items.) 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.

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)

	E OF COMPLIANCE
Ve certify that the statements made in the report are correct f the ASME Code, Section XI.	and this <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp N/A	
ertificate of Authorization No: N/A Expir	ration Date N/A
igned: <u>Supervising ASME</u> Owner or Owner's Designee, Title	Codes Engineer Date: 5/13/77
CERTIFICATE	OF INSPECTION
as performed examinations and taken corrective measures of equirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employ xaminations and corrective measures described in this Own mployer shall be liable in any manner for any personal inju- onnected with this inspection.	oloyer makes any warranty, expressed or implied, concerning the ner's Report. Furthermore, neither the Inspector nor his any or property damage or a loss of any kind arising from or ons <u>1862</u> California
Inspector's Signature	National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code Section X

1.	Owner:	Southern California Edison Company	- A 10 1.	2	
		2244 Walnut Grove Avenue Rosemead, California 91770	MO: Rspec:	97010253000 GEN-150	
				40130 (B6)	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1201-15	
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identifie	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III. Class 2-NF. 1974 Edition Summer 1974 Addends; 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	Manufacture: Serial No.	National Board No.	Other Identification	Year Built	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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in liters 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 : The replacement snubber was certified to a higher code class, ASME III-1-NF, as allowed by ASME III, paragraph NCA-2134.

And and a second s	CERTIFICATE OF COMPLIANCE	er men en genere sider an en redricted ar bedar en artelijke in de soar de soar
We certify that the statements ma of the ASME Code, Section XI.	de in the report are correct and this <u>replacement</u> conforms repair or replacement	to the rules
Type Code Symbol Stamp: N/A		
Certificate of Authorization No:	N/A Expiration Date: N/A	
Signed: Mult Owner or Owner's Desig	Supervising ASME Codes Engineer Date: 5/	3/97
	CERTIFICATE OF INSPECTION	
, the undersigned holding a valid	commission issued by the National Board of Boiler and Press	ure Vessel Inspectors and
he State or Province of <u>Californ</u> Waltham, <u>Massachusetts</u> have <u>0</u> to <u>1</u> has performed examinations and	commission issued by the National Board of Boiler and Press ia, and employed by <u>Arkwright Mutual Insurance Compar</u> inspected the components described in this Owner's Report du <u>05/15/97</u> , and state that to the best of my knowled taken corrective measures described in this Owner's Report in	ny of uring the period lige and belief, the Owner
the State or Province of <u>Californ</u> Waltham, Massachusetts have <u>OMAPA</u> to <u>Californ</u> to <u>Californ</u>	commission issued by the National Board of Boiler and Press ia, and employed by <u>Arkwright Mutual Insurance Compar</u> inspected the components described in this Owner's Report du <u>05/15/97</u> , and state that to the best of my knowled taken corrective measures described in this Owner's Report in	iv of uring the period lige and belief, the Owner accordance with the d or implied, concerning the he Inspector nor his
the State or Province of <u>Caliform</u> Waltham, Massachusetts have <u>01104197</u> to <u>c</u> has performed examinations and requirements of the ASME Code By signing this certificate, neither examinations and corrective mea enaployer shall be liable in any m connected with this inspection.	commission issued by the National Board of Boiler and Press ia, and employed by <u>Arkwright Mutual Insurance Compar</u> inspected the components described in this Owner's Report du <u>05/15/97</u> , and state that to the best of my knowled taken corrective measures described in this Owner's Report in Section XI. The Inspector nor his employer makes any warranty, expresse sures described in this Owner's Report. Furthermore, neither to anner for any personal injury or property damage or a loss of a	ny of by of lige and belief, the Owner accordance with the d or implied, concerning the he Inspector nor his ny kind arising from or
the State or Province of <u>Caliform</u> Waltham, Massachusetts have <u>OMAPOT</u> to <u>Caliform</u> to <u>Caliform</u>	commission issued by the National Board of Boiler and Press ia, and employed by <u>Arkwright Mutual Insurance Compar</u> inspected the components described in this Owner's Report du <u>05/15/97</u> , and state that to the best of my knowled taken corrective measures described in this Owner's Report in Section XI. The Inspector nor his employer makes any warranty, expresse sures described in this Owner's Report. Furthermore, neither to anner for any personal injury or property damage or a loss of a	ny of by of lige and belief, the Owner accordance with the d or implied, concerning the he Inspector nor his ny kind arising from or

As Required by the Provisions of the ASME Code Section20

1	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770		2 97010319000 GEN-150	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40141A (F3) S2-1301-1	
3	Work Po	erformed by: Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A
4	Identifi	cation of System: Main Steam	Expirat	ion Date:	N/A

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	R-paired, Replaced or Replacement	ASNE 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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 ur. x 11 in., (2) arformation 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 : 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 Rep	oris are available on-site)	
ana ana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny	CERTIFICATE OF C	OMPLIANCE	
We certify that the statements made in the re if the ASME Code, Section XI.	eport are correct and this	s <u>replacement</u> repair or replacem	conforms to the rules
ype Code Symbol Stamp: N/A			
Certificate of Authorizatica No: N/A	Expiration D	ate: N/A	
Signed:	pervising ASME Codes	Engineer Di	ate: 5/13/97
	CERTIFICATE OF IN	SPECTION	
Waltham, Massachuseits have inspected to 01/08/97 to 05/15 has performed examinations and taken correction of the ASME Code, Section X	197, and state the ective measures describ	hat to the best of r	ny knowledge and belief, the Owner
By signing this certificate, neither the Inspe examinations and corrective measures descr employer shall be hable in any manner for a connected with this inspection.	ribed in this Owner's Re any personal injury or pr	port. Furthermon operty damage of	re, neither the Inspector nor his r a loss of any kind arising from or
		1NO1	California
Inspector's Signature	CommissionsN	Vational Board, Si	tate, Province, and Endorsements
	Commissions	Vational Board, Si	
	Commissions	Vational Board, S	

As Required by the Provisions of the ASME Code SectionXC

	L	Owner:	2244 Walnu	hern California Edison Company Walnut Grove Avenue mead, California 91770		Unit: 2 MO: 97010322001 970103 Rspec: 009-97			
	2.	Plant:		Nuclear Generating Station nte, California 92674-0128		40123B (F6) S2-1208-4			
	3.	Work Pe	erformed by	Southern California Edison Company		Code Symbol Stamp	N/A N/A		
		Identifi	Identification of System. Chemical and Volume Control		Expiration Date: N/A				

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
2" 1500# Y-Type Globe Valve	Kerotest	AFE2-15	N/A	S21208MU003, RSO-8261-84, RSO-5982-84	1984	Repaired	Yes

7. Description of Work:

The valve in plant location S21208MU003 was found to have a seat leakage problem. The bonnet seal weld was cut to gain access to the valve internals. No ASME Code items were replaced. The seal weld was reapplied in accordance with weld record WR2-97-042 and Repair Specification 009-97. Reference: NCR 970100191

8. Tests Conducted: <u>System Inservice Pressure Test</u> See: AR 961100997-3 Pressure: NOP

Temp: N/A

NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 1) in., (2) information in litems 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 Manufacturers 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 Date: 5/12/47 Signed: Supervising ASME Codes Engineer 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 <u>011/15</u>/97 to <u>05/13</u>/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 Commissions 1862 California National Board, State, Province, and Endorsements Date May

As Required by the Provisions of the ASME Code Section X

1.	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	97011131000	
		Rosemead, California 91770	Rspec:	012-97	
			P&ID:	40141A (F7)	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5	S2-1305-8	
3.	Work Pe	erformed by: Southern California Edison Company	Author	ode Symbol Stamp ization No:	N/A
4	Identifi	cation of System: Main Steam	Expira	tion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda, Code Cases: N1516-1

(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 Mapufacturer	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	Repaired	Yes

7. Description of Work:

The check valve located in plant position S21305MU129 was disassembled for replacement of the valve disc. Disc replacement required that the seat ring-to-valve body seal weld be removed. MO 97011131 allowed for the reinstallation of the seat ring-to-valve body seal weld. Eroded areas of the valve body were contoured, and weld build up performed on eroded areas where the valve seat ring was installed. All welding activities, MT and UT examinations performed in accordance with weld record WR2-97-060 and Repair Specification 012-97.

8. Tests Conducted: <u>System Functional Pressure Test</u> See: AR 930600096-8 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 invalid and dated by the Owner or Owner's designee and the ALA.

	(Applicable Manufacturer's Data Reports are available on-site)
r hannerer winnen anderen anderen anderen anderen andere andere andere andere andere andere andere andere ander	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this <u>repair</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Signed Owner or Owner's Designee, Title	Supervising ASME Codes E gineer Date: 5/13/97
	CERTIFICATE OF INSPECTION
wannam, wassachusetts nave inspecte	d the components described in this Owner's Report during the period
0///7/97 to 0.5//4 has performed examinations and taken con requirements of the ASME Code, Section	$\frac{1}{97}$ , and state that to the best of my knowledge and belief, the Owner prfective measures described in this Owner's Report in accordance with the in XI.
0///7/97 to 05//9 has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des	$\frac{\mu}{97}$ , and state that to the best of my knowledge and belief, the Owner prfective measures described in this Owner's Report in accordance with the
<u>O///7/97</u> to <u>05//9</u> has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	<u><u><u>U</u></u>, and state that to the best of my knowledge and belief, the Owner mrective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning th scribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1X62</u> <u>California</u></u>
<u>O///7/97</u> to <u>05//9</u> has performed examinations and taken con requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for	4/97, and state that to the best of my knowledge and belief, the Owner infective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or
0///7/97 to 05/19 has performed examinations and taken con- requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner for connected with this inspection.	<u><u><u>U</u></u>, and state that to the best of my knowledge and belief, the Owner mrective measures described in this Owner's Report in accordance with the a XI. pector nor his employer makes any warranty, expressed or implied, concerning th scribed in this Owner's Report. Furthermore, neither the Inspector nor his or any personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1X62</u> <u>California</u></u>

As Required by the Provisions of the ASME Code Section.XI

	1.	Owner:	Southern California Edison Company	Unit:	2		
			2244 Walnu: Grove Avenue	MO:	97010759000		
í.			Rosemead, California 91770	Rspec:	008-97		
			이 아파 물건이 같이 다 가지 않는 것이 같아요. 그 이	P&ID:	40114D (B4)		
	2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1204-34		
	3	3. Work Performed by: Southern California Edison Company			ode Symbol Stamp ization No:	N/A	
	4.	Identifi	cation of System: Safety Injection and Shutdown Cooling	Expirat	tion Date:	N/A	

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

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

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board Nc.	Other Identification	Year Buih	Replaced or Replacement	ASME Code Stamped Yes/No
4" 900# Gate Vaive	WKM	507387	1529	2HV9307	1979	Repaired	Yes

#### 1. 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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 m. x (1) m., (2) information in hems 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 installed and dated by the Owner or Owner's designer and the ALA.

9. Remarks : None.

Signed:

#### (Apphoshie Manufacturer's Data Reports are available m-atte)

#### 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

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 <u>01/10/97</u> to <u>05/15/97</u>, 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

Commissions\_

California National Board, State, Province, and Endorsements

Date Math

As Required by the Provisions of the ASME Code SectionXI

1	Owner:	Southern California Edison Company	Unit:	2		
		2244 Walnut Grove Avenue	MO:	97011349000		
		Rosemead, California 91770	Rspec:	GEN-152 R2		
	-			40113 (D5)		
2.	Plant	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-1204-5		
3.	Work Pe	rformed by Southern California Edison Company		ode Symbol Stamp: ization No:	N/A N/A	
4	Identific	ation of System: Safety Injection and Shutdown Cooling	Expira	tion Date:	N/A	

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

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 ... ork:

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 lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x 11 in .(2) information in liems 1 through 0 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 installed and dated by the Owner or Owner's designee and the ALA.

9. Remarks : CR-3006-95 reconciles the replacement load pins which were certified to ASME III-1-NF, 1980 Edition Summer 1982 Addenda.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the rej f the ASME Code, Section XI.	port are correct and this replacement conforms to the rules
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Sup</u> Owner of Owner's Designee, Title	ervising ASME Codes Engineer Date: 51397
n August 1000 1000 1000 1000 1000 1000 1000 10	CERTIFICATE OF INSPECTION
he State or Province of <u>California</u> , and emp Waltham, Massachusetts have inspected t	on issued by the National Board of Boiler and Pressure Vessel Inspectors and ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period
he State or Province of <u>California</u> and emp Waltham, <u>Massachusetts</u> have inspected to 0//22/97 to 05/5	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected to <u>Massachusetts</u> have inspected to to <u>Massachusetts</u> have inspected to the spectrum of the second taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspected examinations and corrective measures descri	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected to <u>May 2007</u> to <u>05005</u> to <u>05005</u>	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>77</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the I. ctor nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his my personal injury or property damage or a loss of any kind arising from or
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected to <u>May 2007</u> to <u>05005</u> to <u>05005</u>	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>9</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the I. ctor nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected the <u>OURCENT</u> to <u>OSU</u> has performed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspect examinations and corrective measures descr employer shall be liable in any manner for a connected with this inspection.	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the I. ctor nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his my personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1862</u> <u>California</u>
he State or Province of <u>California</u> , and emp Waltham, <u>Massachusetts</u> have inspected the <u>OURCENT</u> to <u>OSU</u> has performed examinations and taken correct requirements of the ASME Code, Section X By signing this certificate, neither the Inspect examinations and corrective measures descr employer shall be liable in any manner for a connected with this inspection.	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>97</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the I. ctor nor his employer makes any warranty, expressed or implied, concerning the ribed in this Owner's Report. Furthermore, neither the Inspector nor his my personal injury or property damage or a loss of any kind arising from or <u>Commissions</u> <u>1862</u> <u>California</u>

MO 97011349000

As Required by the Provisions of the ASME Code Section.X

- Unit: 2 Southern California Edison Company 1. Owner: MO: 97021178000 2244 Walnut Grove Avenue Rose, cue, california 91770 Rspec: GEN-106 R2 P&ID: 40111A San Onofre Nuclear Generating Station 2. Plant: S2-1201-3 N-5: San Clemente, California 92674-0128 Type Code Symbol Stamp: N/A 3. Work Performed by: Southern California Edison Company N/A Authorization No: Expiration Date: N/A Identification of System: Reactor Coolant 4
  - 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: 1989 Edition, No Addenda

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

Name of Component	Name Of Manufacturist	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: <u>System Leakage Pressure Test</u> See: AR 961100993-3 Pressure: NOP

Temp: N/A

NOTE Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 in x (1) in. (2) information in lterns 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 numbered and dated by th. Owner or Owner's designee and the ALA.



(Applicable Manufacturer's Data Rej	ors are evaluable on-site)
CERTIFICATE OF C	OMPLIANCE
We certify that the statements made in the report are correct and thi of the ASME Code, Section XI.	s <u>replacement</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A Expiration D	ate: N/A
Signed: <u>UMBELIC Supervising ASME Codes</u> Owner or Owner's Designee, Title	Engineer Date 5/3/97
CERTIFICATE OF IN	SPECTION
the undersigned holding a valid commission issued by the Nation the State or Province of <u>California</u> , and employed by <u>Arkwright M</u> <u>Waltham</u> , <u>Massachusetts</u> have inspected the components describe <u>02/21/97</u> to <u>05/14/97</u> , and state the has performed examinations and taken corrective measures describe requirements of the ASME Code, Section XI.	Mutual Insurance Company of ed in this Owner's Report during the period hat to the best of my knowledge and belief, the Owner ed in this Owner's Report in accordance with the
xaminations and corrective measures described in this Owner's Re mployer shall be liable in any manner for any personal injury or pr connected with this inspection.	port. Furthermore, neither the Inspector nor his
Onkerman Commissions	
Inspecte : Signature /	lational 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: MO: Rspec:	2 97021481000 GEN-156	
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40111A S2-1201-3	
3.	Work Pe	erformed by: Southern California Edison Company		ode Symbol Stamj ization No:	p: N/A N/A
4.	Identifie	cation of System: Reactor Coolant	Expirat	ion Date:	N/A

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda; Code Cases: None

(b) Applicable Edition of Section XI Utilized for Repairs or Repla. ements: 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
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 ALA.

	CERTIFICATE OF COMPLIANCE
Ve certify that the statements made in th f the ASME Code, Section XI.	the report are correct and this <u>repair and replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
ertificate of Authorization No: N/A	Expiration Date: N/A
owner or Owner's Designee, Ti	Supervising ASME Codes Engineer Date: 5/12/97
	CERTIFICATE OF INSPECTION
Waltham, Massachusetts have inspe-	d employed by Arkwright Mutual Insurance Company of eted the components described in this Owner's Report during the period
has performed examinations and taken requirements of the ASME Code, Section	corrective measures described in this Owner's Report during the period (13/97), and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the ion XI.
has performed examinations and taken requirements of the ASME Code, Section By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner	corrective measures described in this Owner's Report during the period <u>13/97</u> , and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the
has performed examinations and taken requirements of the ASME Code, Section By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	commissions 1862 California
has performed examinations and taken requirements of the ASME Code, Section By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner	cted the components described in this Owner's Report during the period (13/97), and state that to the best of my knowledge and belief, the Owner corrective measures described in this Owner's Report in accordance with the ion XI. Inspector nor his employer makes any warranty, expressed or implied, concerning th described in this Owner's Report. Furthermore, neither the Inspector nor his for any personal injury or property damage or a loss of any kind arising from or
has performed examinations and taken requirements of the ASME Code, Sector By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	commissions 1862 California
has performed examinations and taken requirements of the ASME Code, Sector By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	commissions 1862 California
has performed examinations and taken requirements of the ASME Code, Sector By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	commissions 1862 California
has performed examinations and taken requirements of the ASME Code, Sector By signing this certificate, neither the I examinations and corrective measures employer shall be liable in any manner connected with this inspection.	commissions 1862 California

As Required by the Provisions of the ASME Code SectionXI

1	Owner	Southern California Edison Company	Unit:	2		
		Malnut Grove Avenue	MO:	97030013000		
		mead, California 91770	Rspec:	GEN-107		
			P&ID:	40111A		
2	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	N/A		
	177 L D	erformed by: Southern California Edison Company	Type C	ode Symbol Stamp	N/A	
3	WORK P	erformed by: Southern California Edison Company		ization No:	N/A	
4	Identifi	cation of System: CEDM Control	Expirat	ion Date:	N/A	

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition Winter 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	
CEDM #19 Vest Valve Assembly	Combustion Engineering	1370-182	N/A	S21104CEDM #19	1978	Repaired	Yes	

7. Description of Work:

Seal welded the housing nut to the ball seal housing in accordance with weld record WR2-97-135 and NCR 970300002, disposition item 1, and Repair Specification Gen-107 (Rev 0) due to leakage after venting evolution.

8. Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 961100993-10 Pressure: NOP

Temp: N/A



NOTE. Supplemental sheets in the form of lasts, sketches, or drawings may be used provided (1) size is 8 1/2 at. 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 installed and dated by the Owner or Owner's designee and the ALA.



	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the of the ASME Code, Section XI.	report are correct and this <u>repair</u> conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed: <u>Milling</u> Owner or Owner's Designee, Tith	e Dat : 5/13/97
	CERTIFICATE OF INSPECTION
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>03/01/97</u> to <u>05/14</u>	ssion issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by <u>Arkwright Mutual Insurance Company</u> of a the components described in this Owner's Report during the period $\frac{249.7}{10.0000}$ , and state that to the best of my knowledge and belief, the Owner
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>03/01/97</u> to <u>05/14</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des employer shall be liable in any manner fo	employed by <u>Arkwright Mutual Insurance Company</u> of ed the components described in this Owner's Report during the period <u>4/97</u> , and state that to the best of my knowledge and belief, the Owner prective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> , and e <u>Waltham</u> , <u>Massachusetts</u> have inspecte <u>03/01/97</u> to <u>05/14</u> has performed examinations and taken co requirements of the ASME Code, Section By signing this certificate, neither the Insp examinations and corrective measures des	employed by <u>Arkwright Mutual Insurance Company</u> of ad the components described in this Owner's Report during the period <u>4/97</u> , and state that to the best of my knowledge and belief, the Owner prrective measures described in this Owner's Report in accordance with the in XI. pector nor his employer makes any warranty, expressed or implied, concerning the scribed in this Owner's Report. Furthermore, neither the Inspector nor his

As	Required	by	the	Provisions	of the	ASME	Code	SectionXI

- 1. Owner: Southern California Edison Company Unit: 2 2244 Walnut Grove Avenue MO: Rosemead, California 91770 Rspec: 027-97 P&ID: N/A 2. Plant: San Onofre Nuclear Generating Station N-5: N/A San Clemente, California 92674-0128 3. Work Performed by: Southern California Edison Company
  - (under owners Section XI Program) Welding Services Inc. (under their and: National Board "NR" Program)

97030186001, WSI Travelers

Type Code Symbol Stamp:	NR
Authorization No:	69
Expiration Date:	11/9

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	Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer	ABB Combustion Engineering	CE70602	21495	S21201ME087	1971		Yes
Thermowells (fabricated) 2ea.	Consolidated Power Supply	HL# 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:

NOTE

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

•• System Leakage Pressure Test

Pres: 4500 psig NOP

Temp: N/A

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.

Supplemental sheets in the form of lasts, 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 mitaled and dated by the Owner or Owner's designee and the ALA.

 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.

(Applecable Manufacturer's Data Reports are available on-ane) 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 Expiration Date: N/A Certificate of Authorization No: N/A Date: 6/11/97 Supervising ASME Codes Engineer Signed: 4 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 0.3/06/97. 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 whis employer makes any warranty, expressed or implied, concerning the examinations and corrective measures describe 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. housen Commissions California National Board, State, Province, and Endorsements Inspector's Signature Gul 11 1997 Date

FORM NR-1 REPORT OF REPAIR IX MODIFICATION OR INSTALLATION OF REPLACEMENT(S) ' TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Work performed by Welding Serv	vices Inc.		37021
2225 Chuland Course V	. (name)		r organization's P. O. no. job. no., etc.)
2225 Skyland Court, Nor		30071	week where the second
wner Southern California H	(address) Edison		
2244 Walnut Grove Avenu		fornia 91770	
Name, address and identification of nuclear por San Clemente, Californi	werplant San Onofte I	Nuclear Generating St	tation
System Unit 2 Pressurizer			
a: Component sepaired, modified or replaced	Repair and Replace	ement	an a
b: Name of manufacturer Combustion	Engineering		
c: Identifying nos. CE70602 21	1495	S21201ME08	7 1971
	Summer 1971	ictional no.) (other) N / A	(year built) N / A
(noitbe)	(addenda)	(Code Case(3))	(Code Class)
Section XI * 1989	No Addend	N/A	and an in the second
(edition)	(addenda)		e Case(s))
Applicable edition of ASME Code Section XI un	nder which repairs, modifications,	or replacements were made: 1992	No N/A
		(edition)	(addenda) (Code Casego
Applicable edition of Construction Code under	which repairs, modifications, or n		unalle "fascoulleniers" * mersuskintenielenen
Design responsibilities Southern Ca.	lifornia Edicon	(Code) (edite	on) (addanda) (Code Caze(
Tests conducted: hydrostatic [] pneumatic [		2	and of a canon real and a construction of the second s
			1) Tecluded
Description of work Replacement	of vessel temper	ature nozzle (2TEO10	1). Included
Description of work Replacement	of vessel temper	ature nozzle (2TEO10 pusple / property identified)	
Description of work <u>Replacement</u>	of vessel temper	ature nozzle (2TEO10 pusple / property identified)	
Description of work Replacement temperbead repair per 1 provided by SCE.	of vessel temper	ature nozzle (2TEO10 pusple / property identified)	
Description of work Replacement temperbead repair per 1 provided by SCE. Remarks:	of vessel temper e d'additional sheet(s) of sheetch(ee) is acce 992 Section XI, I	ature nozzle (2TEO10 pusple / property identified)	
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Description of work <u>Replacement</u> <u>temperbead repair per 1</u> <u>provided by SCE.</u> <u>Remarks:</u> <u>* System leak test perf</u> <u>* Owner's Sec. XI progr</u> <u>repair was performed</u> <u>to use for temperbead</u> <u>We certify that the statements made in this reportsed</u> <u>to use for temperbead</u> <u>We certify that the statements made in this reportsed</u> <u>to use for temperbead</u> <u>Section XI of the ASME Code and the National Certificate of Authorization no. 69</u> <u>Date March 18 19.97</u> . Signed <u>Weld</u> <u>I, the undersigned, holding a valid commission</u> <u>issued by the state or province of Califor</u> <u>of Mass</u> <u>have inspected the repair, mode</u> <u>best of my knowledge and belief, this repair, mode</u> <u>Board rules as defined in the publication NB-10</u>	of vessel temper a of additional sheet(s) or sheetch(ee) is acce 992 Section XI, I ormed by owner am Code of Record per IWA-4500, 199 repai E Tepai E Tepai E CERTIFICATE OF CO ont are correct and the repair, more Board rules as defined in the pub to use the "NR" star ing Services Inc. (reper organization) CERTIFICATE OF IN issued by The National Board of niaand employed by dification or replacement describe odification or replacement has bee 22 current edition. By signing this	ature nozzle (2TE010 public & property identified) WA-4500. Replacemen is 1989 edition, a 2 ed. no add(Owner MPLIANCE dification or replacement of the items d lication NB-102, current edition, mp expires November 7, 1998 2010 (autoritized representative) SPECTION Boiler and Pressure Vessul Inspectors. Arkwright Mutual Ins- in this report on <u>March 18</u> a certificate, neither the Inspector nor his sectificate, neither the Inspector nor his	t nozzle was addenda; Weld had relief requi escribed above conforms to OA May MEDE and certificate of competency UPA CO and state that to the the ASME Code and the Natio s employer makes any warran
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This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229. NB-81

Pare 8

a Required by the Provision	s of the ASME	Code	SectionX
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1	Owner:	Scuthern California Edison Company 2244 Walnut Grove Avenue	Unit: MO:	2 97031346000	
		Rosemead, California 91770	Rspec:	GEN-105 R1	
2	Plant:	San Onofre Nuclear Generating Station		40141A (C5)	
-	I THILL.	San Clemente, Celifornia 92674-0128	N-5:	S2-1201-3	
3	Work Pe	erformed by: Southern California Edison Company	Type C	ode Symbol Stamp:	N/A
				ization No:	N/A
4	Identifi	cation of System: Reactor Coolant	Expirat	ion Date:	N/A

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
Steam Generator	ABB Combustion Engineering	71270-1	N/A	S21301ME089P			Yes
1 1/2"-8N-2A Stud (1)	Crosby Valve & Gage	H1.# 95648, Trace Code 46P	N/A	RSO-2554-85, SA540 Gr.B24	N/A	Replecement	No
1 1/2"-8N-2B Gear Nuts (2)	EG&G	Ht.# 52763, Trace Code V86C-4	N/A	RSO-2554-85, SA194 Gr. 7	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 7, and nuts number 11 and number 12, which were replaced. A VT-1 examination was performed on the replacement stud and nuts with satisfactory results.

8. Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 970301091-4 Pressure: NOP

Temp: N/A

NOTE. Supplemental sheets in the form of lasts, 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.

and the second	(Applicable Manufacturer's Data Reports are evaluable on-site)
-	CERTIFICATE OF COMPLIANCE
We certify that the statements made in of the ASME Code, Section XI.	the report are correct and this replacement conforms to the rules repair or replacement
Type Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	A Expiration Date: N/A
Signed: <u>Owner or Owner's Designee</u> ,	<u>Supervising ASME Codes Engineer</u> Date: <u>C/7/97</u> Title
	CERTIFICATE OF INSPECTION
has performed examinations and take requirements of the ASME Code, Sec By signing this certificate, neither the examinations and corrective measure	<u>09/97</u> , and state that to the best of my knowledge and belief, the Owner in corrective measures described in this Owner's Report in accordance with the etion XI. Inspector nor his employer makes any warranty, expressed or implied, concerning to is described in this Owner's Report. Furthermore, neither the Inspector nor his er for any personal injury or property damage or a loss of any kind arising from or Commissions <u>1862</u> California
1 to la norman.	
Inspector's Signature	National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code SectionXI

1.	Owner:	Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, California 91770	Unit: MO: Rspec:	2 97031358000 GEN-105 R1	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128		40141A (C5) S2-1201-3	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identific	cation of System: Reactor Coolant	Expirat	ion Date:	N/A

- 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
Steam Generator -	ABB Combustion Engineering	71270-1	N/A	S21301ME089P			Yes
1 1/2"-8N-2A Studs (3)	Crosby Valve & Gage	Ht.# 95648, Trace Code 46P	N/A	RSO-1963-85, SA540 Gr.B24	N/A	Replacement	No
1 1/2°-8N-2B Gear Nuts (2)	EG&G	Ht.# 52763, Trace Code V86C-4	N/A	RSO-2554-85, SA194 Gr. 7	N/A	Replacement	No

#### 7. Description of Work:

The stearn generator manway studs and nuts were removed and examined. All manway studs and nuts were acceptable for reuse with the exception of studs number 13, 16 and 19, and nuts number 12 and 18, which were replaced. A VT-1 examination was performed on the replacement studs and nuts with satisfactory results.

8. Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 970301091-4 Pressure: NOP

Temp: N/A

2

NOTE

Supplemental sheets in the form of asts, 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 necorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or Owner's designee and the AIA.

	CERTIFICATE OF COMPLIANCE
We certify that the statements made in the re f the ASME Code, Section XI.	port are correct and this <u>replacement</u> conforms to the rules repair or replacement
ype Code Symbol Stamp: N/A	
Certificate of Authorization No: N/A	Expiration Date: N/A
Signed alleider Sup	pervising ASME Codes Engineer Date: 6/7/97
Owner or Owner's Designee, Title	
alan antara di manya manan kangang yanan kangan kangan kangan kangan kangan kangan kangan kangan kangan kangan T	CERTIFICATE OF INSPECTION
he State or Province of <u>California</u> , and em	on issued by the National Board of Boiler and Pressure Vessel Inspectors and ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period
the State or Province of <u>California</u> , and em Waltham, Massachusetts have inspected 03/23/97 to 06/09	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>2977</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the
the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected <u>03/23/977</u> to <u>06/09</u> has performed examinations and taken corr requirements of the ASME Code, Section > By signing this certificate, neither the Inspec examinations and corrective measures desc employer shall be liable in any manner for	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>2977</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the <u>21</u> .
the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected <u>03/23/47</u> to <u>06/09</u> has performed examinations and taken corr requirements of the ASME Code, Section > By signing this certificate, neither the Inspec examinations and corrective measures desc	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>1977</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the KI. ector nor his employer makes any warranty, expressed or implied, concerning the mibed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or
the State or Province of <u>California</u> , and em Waltham, <u>Massachusetts</u> have inspected <u>03/223/97</u> to <u>06/09</u> has performed examinations and taken corr requirements of the ASME Code, Section > By signing this certificate, neither the Inspe examinations and corrective measures desc employer shall be liable in any manner for	ployed by <u>Arkwright Mutual Insurance Company</u> of the components described in this Owner's Report during the period <u>2977</u> , and state that to the best of my knowledge and belief, the Owner ective measures described in this Owner's Report in accordance with the KI. ector nor his employer makes any warranty, expressed or implied, concerning the writed in this Owner's Report. Furthermore, neither the Inspector nor his

As Required by the Provisions of the ASME Code SectionXI

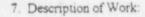
1	Owner:	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	97031365000	
		Rosemead, California 91770	Rspec:	GEN-105 R1	
			P&ID:	40141A (F5)	
2.	Plant:	San Onofre Nuclear Generating Station San Clemente, California 92674-0128	N-5:	S2-120-13	
3.	Work Pe	rformed by: Southern California Edison Company		ode Symbol Stamp ization No:	N/A N/A
4.	Identific	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

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 Manufactur <del>er</del>	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	ABB Combustion Engineering	71270-2	22219	S21301ME088P	1976		Yes
1 1/2" Manway Stud (1)	Crosby Valve & Gage	Ht.#N93878-0031	N/A	RSO-1963-85, SA540 Gr.B24	N/A	Replacement	No



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 3, which was replaced. A VT-1 examination was performed on the replacement stud with satisfactory results.

8. Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 961100993-7 Pressure: NOP

Temp: N/A



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

	CERTIFICATE OF C	OMPLIANCE	
Ve certify that the statements made in the first	e report are correct and thi	s <u>replacement</u> con repair or replacement	forms to the rules
ype Code Symbol Stamp: N/A			
Certificate of Authorization No: N/A	Expiration D	ate: N/A	
Signed: <u>Allfeiler</u> Owner or Owner's Designee, Tit	<u>Supervising ASME Codes</u> de	Engineer Date:	5/12/97
	CERTIFICATE OF IN	SPECTION	
Waltham, Massachusetts have inspect <u>03/24/97</u> to <u>05/2</u> has performed examinations and taken c requirements of the ASME Code, Section By signing this certificate, neither the In- examinations and corrective measures de employer shall be liable in any manner f	5/977, and state to orrective measures describ on XI. spector nor his employer n escribed in this Owner's R.	hat to the best of my l ed in this Owner's R nakes any warranty, e eport. Furthermore, r roperty damage or a l	knowledge and belief, the Owner eport in accordance with the xpressed or implied, concerning the
connected with this inspection.	Commissions	1862.	California
connected with this inspection.	Commissions		<u>California</u> Province, and F-Jorsements

As Required by the Provisions of the ASME Code Section 20

1.	Owner.	Southern California Edison Company	Unit:	2	
		2244 Walnut Grove Avenue	MO:	97031369000	
		Rosemead, California 91770	Rspec:	GEN-105 R1	
2	Plant:	San Onofre Nuclear Generating Station	P&ID:	40141A (F5)	
-	Fidile.	San Clemente, California 92674-0128	N-5:	S2-1201-3	
3.	Work Pe	erformed by Southern California Edison Company		ode Symbol Starn	N/A N/A
4.	Identifi	cation of System: Reactor Coolant	Expirat	tion Date:	N/A

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
Steam Generator	ABB Combustion Engineering	71270-2	22219	S21301ME088P	1976		Yes
1 1/2" Stud (1)	Crosby Valve & Gage	Ht #N93878-0083	N/A	RSO-1963-85, SA540 Gr.B24	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 17, which was replaced. A VT-1 examination was performed on the replacement stud with satisfactory results.

8. Tests Conducted: <u>System Leakage Pressure Test</u> See: AR 961100993-7 Pressure NOP

Temp: N/A

Supplemental sheets in the form of lass, 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's designee and the ALA.



	CERTIFICATE OF COMPLIANCE
e certify that the statements made in the re the ASME Code, Section XI.	eport are correct and this <u>replacement</u> conforms to the rules repair or replacement
pe Code Symbol Stamp: N/A	
ertificate of Authorization No: N/A	Expiration Date N/A
igned: <u>Owner or Owner's Designee</u> , Title	pervising ASME Codes Engineer Date: 5/12/97
	CERTIFICATE OF INSPECTION
as performed examinations and taken com	the components described in this Owner's Report during the period 3/97, and state that to the best of my knowledge and belief, the Owner fective measures described in this Owner's Report in accordance with the
requirements of the ASME Code, Section . By signing this certificate, neither the Insp	ector nor his employer makes any warranty, expressed or implied, concerning the cribed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or Commissions