



SOUTHERN CALIFORNIA  
**EDISON**

An EDISON INTERNATIONAL<sup>SM</sup> Company

Dwight E. Nunn  
Vice President

July 1, 2004

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

Subject: **Docket No. 50-361**  
**Owner's Report of Inservice Inspection, Form NIS-1**  
**San Onofre Nuclear Generating Station, Unit 2**

Reference: American Society of Mechanical Engineers (ASME)  
Boiler and Pressure Vessel Code (B&PVC), Section XI

Gentlemen:

In accordance with 10CFR50.55a(g) and ASME B&PVC, Section XI, Article IWA 6240(b), this letter submits the Inservice Inspection (ISI) Summary Report, including the Owner's Reports of Repair/Replacement Activities, for San Onofre Nuclear Generating Station, Unit 2. This report covers the period from July 3, 2002 through April 6, 2004, the date Unit 2 returned to service following its Cycle 13 refueling outage.

If you have any questions or require additional information, please contact me or Mr. Clay E. Williams at (949) 368-6707.

Sincerely,

Enclosure: Inservice Inspection Summary Report

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A047

Document Control Desk  
San Onofre Nuclear Generating Station  
Unit 2

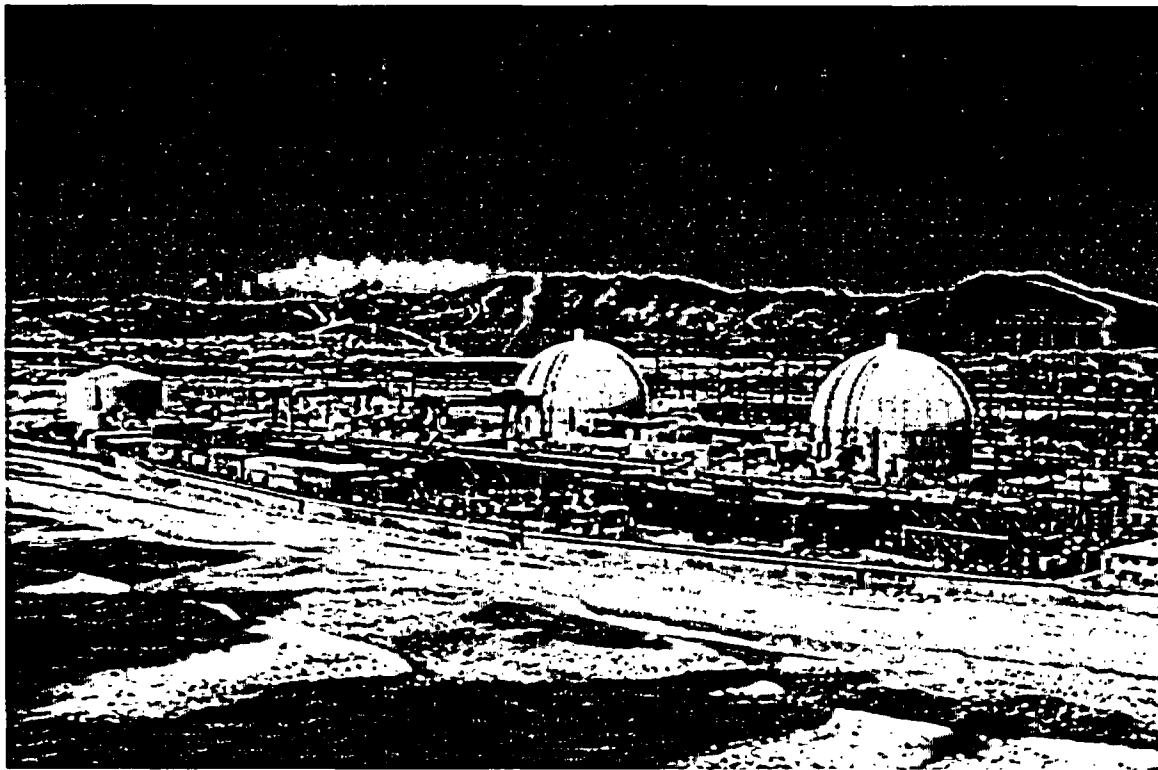
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July 1, 2004  
Owner's Report of ISI

cc: B.S. Mallett, Regional Administrator, NRC Region IV  
D. D. Chamberlain, Director, Division of Reactor Safety, NRC Region IV  
B. M. Pham, NRC Project Manager, San Onofre Units 2 and 3  
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3

State of California  
Department of Industrial Relations  
Division of Occupational Safety and Health  
Pressure Vessels Unit  
Attention: Dabbriu Patnaik, Senior Safety Engineer  
2100 East Katella, Suite 265  
Anaheim, CA 92806-6040

State of California  
Department of Industrial Relations  
Division of Occupational Safety and Health  
Pressure Vessels Unit  
Attention: Don Cook, Principal Pressure Vessel Engineer  
1515 Clay Street, Suite 1302  
Oakland, CA 94612



**SAN ONOFRE NUCLEAR  
GENERATING STATION  
UNIT-2**

**3<sup>rd</sup> INTERVAL, 1<sup>st</sup> PERIOD  
REFUELING OUTAGE-13**

**INSERVICE INSPECTION  
SUMMARY REPORT**

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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 first period of the third Interval.

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

Each 10-year Interval is further divided into 3 periods, which is adjusted to accommodate one or two refueling outages in each period. Adjustments of the Intervals to accommodate these refueling outages are allowed by the ASME Section XI Code (Code) to extend or decrease the Interval by as much as 1 year. This extension was used in the 1st 10-year Interval, which ended in March 1994.

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

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

Scheduled periods for the third 10-year ISI Interval are listed below. Plan and schedule for the third ten-year ISI Interval is provided in Attachment 1 including number and percentage of examinations and tests completed from August 18, 2003 to April 6, 2004.

<u>PERIODS</u>	<u>DATES</u>
1	August 18, 2003 to August 17, 2006
2	August 18, 2006 to August 17, 2010
3	August 18, 2010 to August 17, 2013

This report is prepared in accordance with ASME Section XI Code and intended to provide a summary of ISI activities performed during Unit-2 Cycle 13 outage.

## **2 SUMMARY REPORT**

**Date of Document Completion.....June 10, 2004**

**Name & Address of Owners:**

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

San Diego Gas & Electric Company  
P.O. Box 1831  
San Diego, CA 92119

City of Anaheim  
Public Utilities Department  
200 S. Anaheim Blvd., 6<sup>th</sup> Floor  
Anaheim, CA 92805

City of Riverside  
Supervising Deputy City Attorney  
3900 Main Street,  
Riverside, CA 92522

**Name & Address of Generating Plant:**

San Onofre Nuclear Generating Station  
5000 Pacific Coast Hwy  
San Clemente, CA 92672

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

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

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

1. Owner: Southern California Edison Company  
2244 Walnut Grove Avenue, Rosemead, CA 91770
2. Plant: San Onofre Nuclear Generating Station  
5000 Pacific Coast Hwy  
San Clemente, CA 92672
3. Plant Unit: 2 4. Owner's Certificate of Authorization: N/A
5. Commercial Service Date: 8/18/83 6. National Board Number for Unit: N/A
7. Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial Number	State or Province Number	National Board Number
Reactor Vessel 2MV001	Combustion Engineering	71170	35203-82	22000
Pressurizer 2ME087	Combustion Engineering	70602	35203-82	21495
Reactor Coolant Pump 2MP003	Byron Jackson	701-N-0560	N/A	N/A
Steam Gen 2ME088	Combustion Engineering	71270-2	35203-82	22219
Steam Gen 2ME089	Combustion Engineering	71270-1	35203-82	22218

FORM NIS-1 (back)

8. Examination Date: August 18, 2003 to April 6, 2004  
9. Inspection Period Identification: X 1st Period      2nd Period      3rd Period  
10. Inspection Interval Identification:      1st 10-Yr      2nd 10-Yr X 3rd 10-Yr      4th 10-Yr  
11. Applicable Edition of Section XI... IWB, IWC, IWD, IWF, 1995 Edition, with the 1996  
Addenda, IWE, IWL 1992 Edition with 1992 Addenda,  
12. Date/Revision of Inspection Plan... August 18, 2003, Doc # 90073, Rev 0  
13. Abstract of Examinations & Tests.....See page 6  
14. Abstract of Results of Examinations & Tests:.....See page 7  
15. Abstract of Corrective Measures:.....See page 7

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

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

Date: 6-22-2004 Signed: Southern California Edison By: Daniel P. Brey  
(Owner) Manager, Maintenance Engineering

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBCT of Hartford Connecticut 06103, have inspected the components described in this Owner's Report during the period August 18, 2003 to April 6, 2004 and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

Edward D. Shoston Commissions CA 1574 'N' + 'I'  
Inspector's Signature NB, State, Province or Endorsements

Date: 6/23/04



### **ABSTRACT OF EXAMINATIONS & TESTS**

This report covers the inservice examination activities conducted at the San Onofre Nuclear Generating Station (SONGS), Unit 2. The examinations and tests were performed during first period of the third ten-year Interval in accordance with approved ISI program procedures and document 90073, Third 10-year Inservice Inspection Program Plan. The inservice examinations were conducted in accordance with 10 CFR Part 50.55a and ASME Boiler and Pressure Vessel Code Section XI.

List of inservice examinations and tests performed from August 18, 2003 to April 6, 2004 are included in Attachment-2.

**ABSTRACT OF EXAMINATIONS/ TESTS RESULTS AND CORRECTIVE  
MEASURES**

Results of all the inservice examinations/tests performed from August 18, 2003 to April 6, 2004 found to be ASME Section XI Code acceptable, hence corrective measures were not needed.

### **3 MECHANICAL SEAL ASSEMBLY (MNSA),** **VISUAL EXAMINATION RESULTS**

As stated in Relief Request ISI-3-6, submitted by letter from SCE to U.S. NRC Document Control Desk dated July 2, 2003 Subject: Docket Nos. 50-361 and 50-362, Notification of Updating the Inservice Inspection Program and Submittal of Relief Requests for the Third 10-Year Inspection Interval, San Onofre Nuclear Generating Station Units 2 and 3, Visual examination results of installed Unit-2 MNSA were acceptable per approved procedures.

#### **4 STEAM GENERATOR EXAMINATIONS**

Examination report has been sent to the USNRC dated March 17, 2004,  
Subject: Docket No. 50-361, Special Report: Inservice Inspection of Steam  
Generator Tubes, Cycle 13 San Onofre Nuclear Generating Station, Unit-2.

**5 ATTACHMENT- 1**

**ISI PLAN AND SCHEDULE FOR THE THIRD INTERVAL INCLUDING  
NUMBER AND PERCENTAGE OF EXAMINATIONS AND TESTS  
COMPLETED (2 Pages)**

**ISI PLAN AND SCHEDULE FOR THE THIRD INTERVAL INCLUDING NUMBER AND PERCENTAGE OF EXAMINATIONS AND TESTS COMPLETED**

Subsection	Category	Examinations Required, See Note-1	Period-1, See Note-2	Period-2, See Note-2	Period-3, See Note-2	Number of examinations completed during U2C13	Percentage of examinations completed for the 3rd interval during U2C13, See Note-3
IWB	B-A	27	3	2	22	3	11%
	B-B	8	3	2	3	0	0%
	B-D	34	6	10	18	0	0%
	B-F	5	1	2	2	0	0%
	B-G-1	248	86	54	108	12	4.84%
	B-G-2	194	61	67	66	0	0%
	B-J	73	25	25	23	0	0%
	B-K	12	4	3	5	0	0%
	B-L-1	2	0	0	2	0	0%
	B-L-2	See Note-4	N/A	N/A	N/A	N/A	N/A
	B-M-1	8	3	3	2	0	0%
	B-M-2	See Note-4	N/A	N/A	N/A	N/A	N/A
	B-N-1	3	1	1	1	0	0%
	B-N-2	30	0	0	30	0	0%
	B-N-3	2	0	0	2	0	0%
	B-O	10	0	0	10	0	0%
	B-P	Each reactor refueling outage prior to plant startup				100%	N/A
	B-Q	Governed by the plant Technical Specification					
IWC	C-A	20	7	6	7	7	35%
	C-B	8	2	2	4	0	0%
	C-C	49	16	15	18	16	32.65%
	C-F-1	140	47	47	47	53	37.80%
	C-F-2	29	9	10	10	9	31.00%
	C-G	5	1	2	2	1	20%
	C-H	Each inspection period					80%
IWD	D-A	61	21	20	20	24	39.34%
	D-B	Each inspection period					45%
IWF	F-A	289	97	96	96	93	32.18%
IWE	E-A	Containment Surfaces	General Visual	General Visual	Visual VT-3	1	66%, See note-5
	E-C	9	3	3	3	3	66%, See note-5
	E-D	3	1	1	1	1	66%, See note-5
	E-G	101	0	0	101	0	0%, See note-5
IWL	L-A	Once in every ten years				0	100%, See note-5
	L-B	Once in every five years				0	50%, Seenote-5
Augmented ISI for the Reactor coolant pump flywheels and high energy piping							
	Flywheels	4	0	0	4	0	0%
	High energy piping welds	183	59	62	62	59	32.24%
Notes : 1) Required Examinations subject to change based on							
a) Plant Modification							

ISI PLAN AND SCHEDULE FOR THE THIRD INTERVAL INCLUDING NUMBER AND PERCENTAGE OF EXAMINATIONS AND TESTS COMPLETED

b) Periodic update of Regulatory Guide 1.147, Inservice Inspection Code Case Acceptability					
ASME Section XI, Division 1					
c) Periodic update of 10CFR 50.55a Codes and Standards					
d) Approval or disapproval of relief requests submitted to the NRC inaccordance with 10CFR 50.55a					
2) Number of examinations scheduled for a period may change due to					
a) Component accessibility because of high radiation or contamination					
b) Based on Note-1					
3) Subject to change based on Note-1					
4) Examination is required only when a pump or valve is disassembled for maintenance, repair or volumetric examination					
5) The initial 120 months (1st interval) for containment ISI for Subsections IWE and IWL begun on September 9, 1998, and scheduled to end on September 8, 2008, in accordance with 10CFR 50.55a(b)(2)(vi)					

**6 ATTACHMENT- 2**

**LIST OF ISI EXAMINATIONS AND  
TESTS COMPLETED (6 Pages)**



**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13**

ISI DESIGNATION NUMBER	COMPONENT EXAMINED OR TESTED	CODE CLASS	CODE CATEGORY	CODE ITEM NUMBER	EXAMINATION OR TEST METHOD		
					VOLUMETRIC EXAM	SURFACE EXAM	VISUAL EXAM
02-002-001	REACTOR CLOSURE HEAD FLANGE-TO-TORUS WELD	1	B-A	B1.40	UT	MT	
02-002-002	PEEL SEGMENT WELD @ 18 DEGREES	1	B-A	B1.22	UT		
02-002-003	PEEL SEGMENT WELD @ 90 DEGREES	1	B-A	B1.22	UT		
02-005-035	SUPPORT SKIRT	1	F-A	F1.40B			VT-3
02-028-026	SNUBBER ATTACHED TO VALVE	1	F-A	F1.40C			VT-3
02-028-027	SNUBBER ATTACHED TO VALVE	1	F-A	F1.40C			VT-3
02-036-004	VERTICAL SUPPORT - COLUMN ASSEMBLY	1	F-A	F1.40A			VT-3
02-036-005	VERTICAL SUPPORT - COLUMN ASSEMBLY	1	F-A	F1.40A			VT-3
02-036-006	VERTICAL SUPPORT - COLUMN ASSEMBLY	1	F-A	F1.40A			VT-3
02-036-008	MOTOR HYDRAULIC SNUBBER (HORIZONTAL)	1	F-A	F1.40C			VT-3
02-036-015	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-016	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-017	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-018	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-019	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-020	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-031	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-036-032	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-036-033	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-036-034	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-036-035	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-036-036	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1
02-043-043	FEEDWATER NOZZLE-TO-EXTENSION WELD	2	CF2	C5.51	UT	MT	
02-044-043	SNUBBERS W/WELDED SUPPORT	2	C-C	C3.20		MT	
02-044-002	18" SCH 80 EXTENSION-TO-ELBOW	2	CF2	C5.51	UT	MT	
02-044-006A	18" SCH 100 PIPE-TO-SWEEP-O-LET	2	CF2	C5.81		MT	
02-044-043	SNUBBER	2	F-A	F1.20C			VT-3
02-044-047	GUIDE & Y-STOP W/INTEGRALLY WELDED ATTACHMENT	2	F-A	F1.20B			VT-3
02-045-002	18" SCH 80 EXTENSION-TO-ELBOW	2	CF2	C5.51	UT	MT	
02-045-011	20" SCH 100 REDUCER-TO-PIPE	2	CF2	C5.51	UT	MT	
02-045-012	20" SCH 100 PIPE-TO-VALVE	2	CF2	C5.51	UT	MT	
02-047-053	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		MT	

# LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13

02-047-032	6" SCH 120 PIPE-TO-VALVE	2	CF2	C5.51	UT	MT	
02-047-037	6" SCH 120 ELBOW-TO-PIPE	2	CF2	C5.51	UT	MT	
02-047-053	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-047-055	GUIDE	2	F-A	F1.20A			VT-3
02-047-031	6" SCH 120 TEE-TO-PIPE	2	CF2	C5.51	UT		
02-047-037A	6" SCH 120 PIPE-TO-PIPE	2	CF2	C5.51	UT		
02-047-038	6" SCH 120 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-047-039	6" SCH 120 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-047-039A	6" SCH 120 PIPE-TO-PIPE	2	CF2	C5.51	UT		
02-047-039B	6" SCH 120 PIPE-TO-PIPE	2	CF2	C5.51	UT		
02-047-040	6" SCH 120 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-047-041	6" SCH 120 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-047-042	6" SCH 120 PIPE-TO-VALVE	2	CF2	C5.51	UT		
02-049-019C	6" SCH 80 ELBOW-TO-ELBOW	2	CF2	C5.51	UT		
02-049-019D	6" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-049-019E	6" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-049-019F	6" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-049-020	6" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-049-021	6" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-049-021A	6" SCH 80 PIPE-TO-VALVE STUB END	2	CF2	C5.51	UT		
02-049-022	6" SCH 80 VALVE STUB END-TO-PIPE	2	CF2	C5.51	UT		
02-049-027	Y-STOP	2	F-A	F1.20A			VT-3
02-049-028	Y-STOP	2	F-A	F1.20A			VT-3
02-049-019B	6" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-050-030	40" PIPE-TO-PENETRATION WELD	2	CF2	C5.51	UT	MT	
02-050-040	SNUBBER	2	F-A	F1.20C			VT-3
02-052-111	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		MT	
02-052-111	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-052-041A	LONGITUDINAL - TEE LONG SEAM	2	CF2	N/A	UT		
02-052-041B	LONGITUDINAL WELD - TEE SHORT SEAM	2	CF2	N/A	UT		
02-052-041C	LONGITUDINAL WELD - TEE SHORT SEAM	2	CF2	N/A	UT		
02-052-042	40" REDUCING TEE-TO-26" ELBOW	2	CF2	C5.51	UT		
02-052-042A	26" ELBOW BODY WELD - OUTSIDE RADIUS	2	CF2	N/A	UT		
02-052-042B	26" ELBOW BODY WELD - INSIDE RADIUS	2	CF2	N/A	UT		
02-052-044	26" ELBOW-TO-HEADER	2	CF2	C5.51	UT		
02-052-044A	LONGITUDINAL WELD - HEADER SEAM	2	CF2	N/A	UT		
02-052-045	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-046	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-047	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		

# LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13

02-052-048	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-027	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-028	34" HEADER-TO-HEADER	2	CF2	C5.51	UT		
02-052-028A	LONGITUDINAL WELD - HEADER SEAM	2	CF2	N/A	UT		
02-052-029	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-030	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-031	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-032	34" HEADER-TO-CAP	2	CF2	C5.51	UT		
02-052-032A	LONGITUDINAL WELD - HEADER SEAM	2	CF2	N/A	UT		
02-052-033	6" SCH 80 PIPE-TO-HEADER EXTRUSION	2	CF2	C5.51	UT		
02-052-035	6" PIPE-TO-6" X 1" SWAGE NIPPLE	2	CF2	C5.51	UT		
02-052-038A	LONGITUDINAL - REDUCING TEE LONG SEAM	2	CF2	N/A	UT		
02-052-038B	LONGITUDINAL WELD - REDUCING TEE SHORT SEAM	2	CF2	N/A	UT		
02-052-038C	LONGITUDINAL WELD - REDUCING TEE SHORT SEAM	2	CF2	N/A	UT		
02-052-040	40" TEE-TO-TEE	2	CF2	C5.51	UT		
02-052-015	8" SCH 80 PIPE-TO-PIPE	2	CF2	C5.51	UT		
02-052-016	8" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-052-017	8" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-052-018	8" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-052-019	8" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-052-020	8" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-052-021	8" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-052-022	8" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT		
02-052-023	8" SCH 80 ELBOW-TO-PIPE	2	CF2	C5.51	UT		
02-052-024	8" SCH 80 PIPE-TO-VALVE	2	CF2	C5.51	UT		
02-052-026	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT		
02-052-001	PENETRATION NO. 32-TO-40" REDUCING TEE	2	CF2	C5.51	UT		
02-061-008	16" CONTROL VALVE BODY (DRAWING NO. SO23-507-5-1-36)	2	C-G	C6.20		PT	
02-061-217	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-061-196	SNUBBER	2	F-A	F1.20C			VT-3
02-061-197	Y-STOP	2	F-A	F1.20A			VT-3
02-062-030-01	LPSI PUMP #1 SUPPORT COMPONENTS	2	F-A	F1.40B			VT-3
02-062-030-02	LPSI PUMP #1 SUPPORT COMPONENTS	2	F-A	F1.40B			VT-3
02-062-030-03	LPSI PUMP #1 SUPPORT COMPONENTS	2	F-A	F1.40B			VT-3
02-065-1380	GUIDE & Y-STOP W/INTEGRALLY WELDED PLATE	2	C-C	C3.20		PT	

# LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13

02-065-1390	AXIAL STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-065-1400	VARIABLE SPRINGS W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-065-1220	GUIDE & Y-STOP W/INTEGRALLY WELDED WRAPPER PLATE	2	C-C	C3.20		PT	
02-065-1150	GUIDE & AXIAL STOP W/INTEGRALLY WELDED WRAPPER PLATE & LUGS	2	C-C	C3.20		PT	
02-065-1170	Y-STOP W/CURVED PLATE	2	C-C	C3.20		PT	
02-065-1020	AXIAL STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-065-1380	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-065-1390	AXIAL STOP	2	F-A	F1.20A			VT-3
02-065-1400	VARIABLE SPRINGS	2	F-A	F1.20C			VT-3
02-065-1220	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-065-1120	AXIAL STOP	2	F-A	F1.20A			VT-3
02-065-1150	GUIDE & AXIAL STOP	2	F-A	F1.20B			VT-3
02-065-1170	Y-STOP	2	F-A	F1.20A			VT-3
02-065-1020	AXIAL STOP	2	F-A	F1.20A			VT-3
02-066-079	GUIDE	2	F-A	F1.20A			VT-3
02-068-910	GUIDE & Y-STOP W/4 INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-068-910	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-069-2350	2" SCH 80S PIPE-TO-2" ELBOW	2	CF1	C5.21	UT	PT	
02-069-2360	2" ELBOW-TO-2" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-2050	3" X 2" REDUCER-TO-2" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-2090	2" SCH 80S PIPE-TO-2" ELBOW	2	CF1	C5.21	UT	PT	
02-069-2100	2" ELBOW-TO-2" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-1720	3" SCH 160 PIPE-TO-3" ELBOW	2	CF1	C5.21	UT	PT	
02-069-1730	3" ELBOW-TO-3" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-1740	3" SCH 160 PIPE-TO-3" ELBOW	2	CF1	C5.21	UT	PT	
02-069-1750	3" ELBOW-TO-3" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-1790	3" FLANGE-TO-3" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-1640	3" SCH 160 PIPE-TO-3" ELBOW	2	CF1	C5.21	UT	PT	
02-069-1650	3" ELBOW-TO-3" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-1670	3" SCH 160 PIPE-TO-ELBOW	2	CF1	C5.21	UT	PT	
02-069-1680	3" ELBOW-TO-3" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-890	2" SCH 80S PIPE-TO-2" ELBOW	2	CF1	C5.21	UT	PT	
02-069-900	2" ELBOW-TO-2" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-910	2" SCH 80S PIPE-TO-2" ELBOW	2	CF1	C5.21	UT	PT	
02-069-920	2" ELBOW-TO-2" SCH 160 PIPE	2	CF1	C5.21	UT	PT	

# LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13

02-069-810	2" SCH 80S PIPE-TO-ELBOW	2	CF1	C5.21	UT	PT	
02-069-820	2" ELBOW-TO-2" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-390	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-400	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-410	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-420	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-430	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-440	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-090	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-100	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-110	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-120	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-130	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-140	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-150	4" SCH 80S PIPE-TO-4" ELBOW	2	CF1	C5.21	UT	PT	
02-069-160	4" ELBOW-TO-4" SCH 80S PIPE	2	CF1	C5.21	UT	PT	
02-069-3930	3-WAY STOP	2	F-A	F1.20B		PT	VT-3
02-069-3220	INTEGRALLY WELDED ANCHOR STRAP	2	C-C	C3.20		PT	
02-069-2700	2" SCH 80S PIPE-TO-2" ELBOW	2	CF1	C5.21	UT	PT	
02-069-2710	2" ELBOW-TO-2" SCH 160 PIPE	2	CF1	C5.21	UT	PT	
02-069-2720	2" SCH 80S PIPE-TO-2" VALVE	2	CF1	C5.21	UT	PT	
02-069-3870	Y-STOP	2	F-A	F1.20A			VT-3
02-069-3930	3-WAY STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-069-3720	GUIDE	2	F-A	F1.20B			VT-3
02-069-3760	GUIDE	2	F-A	F1.20B			VT-3
02-069-3770	Y-STOP	2	F-A	F1.20A			VT-3
02-069-3580	SWAY STRUT	2	F-A	F1.20A			VT-3
02-069-3590	GUIDE	2	F-A	F1.20B			VT-3
02-069-3620	Y-STOP	2	F-A	F1.20A			VT-3
02-069-3220	ANCHOR STRAP	2	F-A	F1.20B			VT-3
02-069-3040	GUIDE	2	F-A	F1.20A			VT-3
02-069-3050	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-069-3060	GUIDE	2	F-A	F1.20A			VT-3
02-072-158	3-WAY STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
02-072-158	3-WAY STOP	2	F-A	F1.20B			VT-3
02-072-152	GUIDE & Y-STOP	2	F-A	F1.20B			VT-3
02-072-137	Y-STOP	2	F-A	F1.20A			VT-3
02-073-190	8" SCH 140 PIPE-TO-ELBOW	2	CF1	C5.11	UT	PT	
02-073-191	8" SCH 140 ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	

# **LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C13**

02-073-192	8" SCH 140 PIPE-TO-PENETRATION NO. 48	2	CF1	C5.11	UT	PT	
02-073-193	PENETRATION NO. 48-TO-8" SCH 140 PIPE	2	CF1	C5.11	UT	PT	
02-073-194	8" SCH 140 PIPE-TO-ELBOW	2	CF1	C5.11	UT	PT	
02-073-195	8" SCH 140 ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	
02-073-165	PENETRATION NO. 49-TO-8" SCH 140 PIPE	2	CF1	C5.11	UT	PT	
02-073-166	8" SCH 140 PIPE-TO-ELBOW	2	CF1	C5.11	UT	PT	
02-073-167	8" SCH 140 ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	
02-073-141	PENETRATION NO. 50-TO-8" SCH 140 PIPE	2	CF1	C5.11	UT	PT	
02-073-072A	PENETRATION NO. 51-TO-8" SCH 140 PIPE	2	CF1	C5.11	UT	PT	
02-075-060	VARIABLE SPRINGS	2	F-A	F1.20C			VT-3
02-075-062	SNUBBER	2	F-A	F1.20C			VT-3
02-078-135	12" SCH 40 TEE-TO-ELBOW	2	CF1	C5.11	UT	PT	
02-078-140	12" SCH 40 ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	
02-078-112	12" SCH 40 PIPE-TO-ELBOW	2	CF1	C5.11	UT	PT	
02-078-113	12" SCH 40 ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	
02-078-115	12" SCH 40 PIPE-TO-TEE	2	CF1	C5.11	UT	PT	
02-078-2280	SNUBBER	2	F-A	F1.20C			VT-3
02-078-2140	GUIDE	2	F-A	F1.20A			VT-3
02-078-2160	Y-STOP	2	F-A	F1.20A			VT-3
02-080-010	INTEGRALLY WELDED ATTACHMENT	2	C-C	C3.10		PT	
02-080-018	INTEGRALLY WELDED ATTACHMENT	2	C-C	C3.10		PT	
02-080-001	TUBESHEET-TO-SHELL WELD	2	C-A	C1.30	UT		
02-080-002	TUBESHEET-TO-SHELL WELD	2	C-A	C1.30	UT		
02-080-003	HEAD CIRCUMFERENTIAL WELD	2	C-A	C1.20	UT		
02-080-004	HEAD CIRCUMFERENTIAL WELD	2	C-A	C1.20	UT		
02-080-005	HEAD CIRCUMFERENTIAL WELD	2	C-A	C1.20	UT		
02-081-001	GIRTH WELD - SHELL END	2	C-A	C1.10	UT		
02-081-002	GIRTH WELD - FLANGE END	2	C-A	C1.10	UT		
SYSTEM LEAKAGE TEST COMPLETED							
PROCEDURE	SYSTEM	CLASS	CATEGORY	TEST			
SO23-XVII-3.1.1	REACTOR COOLANT	1	B-P	VT-2			
SO23-XVII-3.2.1	CHEMICAL AND VOLUME CONTROL	2	C-H	VT-2			
SO23-XVII-3.2.2	MAIN STEAM STEAM	2	C-H	VT-2			
SO23-XVII-3.2.4	SAFETY INJECTION	2	C-H	VT-2			
SO23-XVII-3.2.5	CONTAINMENT SPRAY	2	C-H	VT-2			
Code Cases Applicable to third ten-year ISI interval 1) N-460 2) N-481 3) N-498-1 4) N-522							

**7 ATTACHMENT- 3**

**ABSTRACT AND FORM NIS-2 OWNER'S REPORT FOR**  
**REPAIR / REPLACEMENT ACTIVITY**

## Abstract of Records of Repairs and Replacements

	MO	EQID	Class	NIS-2	Worksum
1	01071546000	2PSV9226	III-2	5/27/04	Replaced relief valve
2	02050522000	S21204MU088	III-2	4/21/04	Replaced flange bolting
3	02061611000	027-81177	III-2	9/3/03	Fabricated replacement MSSV studs
4	02061982001	S21301MU017	III-2	5/14/04	Replaced valve bonnet
5	02070031000	2LV0110A	III-2	5/27/04	Replaced valve spindle
6	02080997000	S21301ME088P	III-1	5/28/04	Replaced SG manway cover bolting
7	02080998000	S21301ME089P	III-1	5/28/04	Replaced SG manway cover bolting
8	02110034000	025-83508-N59380-00-0008	III-2	5/26/04	Rebuilt spare relief valve
9	02121193000	S21208MU172	III-2	5/28/04	Replaced valve disc assembly
10	03021052000	S21301ME089P	III-1	6/1/04	Performed SG tube sleeving
11	03021053000	S21301ME088P	III-1	5/28/04	Performed SG tube sleeving
12	03021546000	S21301ME088	III-2	5/28/04	Replaced SG manway cover bolting
13	03021547000	S21301ME089	III-2	5/28/04	Replaced SG manway cover bolting
14	03021771001	S21305MU124	III-2	5/28/04	Replaced valve poppet assembly
15	03021866000	2PSV8405	III-2	6/3/04	Replaced relief valve bolting
16	03021879000	2PSV8408	III-2	6/3/04	Replaced relief valve bolting
17	03021898000	2PSV8411	III-2	6/3/04	Replaced relief valve bolting
18	03021929000	2PSV8413	III-2	6/3/04	Replaced relief valve bolting
19	03021936000	2PSV8414	III-2	6/3/04	Replaced relief valve bolting
20	03021941000	2PSV8415	III-2	6/3/04	Replaced relief valve bolting
21	03060709000	S2RCE89H001	III-1	5/28/04	Replaced snubbers and repaired snubber brackets
22	03060726000	S2RCE88H001	III-1	5/28/04	Replaced snubbers and repaired snubber brackets
23	03060730000	S2RCP01H001	III-1	5/28/04	Replaced snubber and repaired snubber bracket
24	03060731000	S2RCP02H001	III-1	5/28/04	Replaced snubber and repaired snubber bracket
25	03060732000	S2RCP03H001	III-1	5/28/04	Replaced snubber
26	03060734000	S2RCP04H001	III-1	5/28/04	Replaced snubber
27	03070217000	S21201MU976	III-1	5/28/04	Replaced valve disc and removed counter weight
28	03070218000	S21201MU977	III-1	5/28/04	Replaced plug studs and removed counter weight
29	03080453001	S21206MU006	III-2	5/28/04	Replaced flange bolting
30	03080879000	S22423MU055	III-2	5/28/04	Replaced c.s. piping and valves w/s.s. components
31	03100716000	2PV0201A	III-2	4/23/04	Replaced valve spindle
32	03121003000	S22423MU017	III-2	5/28/04	Replaced c.s. piping and valves w/s.s. components
33	04010279000	S2SI038H068	III-2	5/28/04	Replaced snubber load pins
34	04010831000	2FO9414	III-2	5/28/04	Replaced flow orifice flange fasteners



MO	EQID	Class	NIS-2	Worksum
35 04011628000	S21101MV001A	III-1	4/21/04	Replaced & modified instrument flange adapter hubs
36 04021231000	S2RCE88H001	III-1	5/28/04	Ground down snubber bracket edges
37 04021237000	S2RCE89H001	III-1	5/28/04	Ground down snubber bracket edges
38 04021369000	S21301ME088	III-2	5/28/04	Drilled holes in SG for mounting temperature probe
39 04022126000	S21101MV001A	III-1	4/21/04	Repaired ICI nozzle #97
40 04022170000	S21101MV001A	III-1	4/21/04	Repaired ICI nozzle #98
41 04030079000	2PSV9206	III-2	5/28/04	Replaced inlet flange bolting
42 04030084000	2PSV9208	III-2	5/28/04	Replaced inlet flange bolting
43 04030306000	S2ST002H001	III-2	4/21/04	Replaced snubber
44 04030803000	S21301ME088P	III-1	5/28/04	Installed new welded tube plug
45 04030887000	S21301ME088P	III-1	5/28/04	Removed welded plug by machining
46 04030991000	S22423MU055	III-2	5/28/04	Documented Code studs replaced on MO 04030139
47 04032026001	S21204MT010	III-2	5/28/04	Removed/replaced pipe straps

# 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  
Date: 02/28/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 01071546000
3. Work Performed 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, 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
2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0008	N/A	2PSV9226 (to be rebuilt on MO 02110034)	1985	Replaced	Yes
2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0009	N/A	Rebuilt on MO 01110333	1985	Replacement	Yes

## 7. Description of Work:

Replaced relief valve (s/n N59380-00-0008) in plant position 2PSV9226 with a tested and rebuilt spare (s/n N59380-00-0009).

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A  
See: AR 020100720-01

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

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9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed:

  
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer


Date:

4/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/23/02 to 4/23/04, 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

"N" "I"

California

1574

National Board, State, Province, and Endorsements

Date

May 27, 2004

# 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 Date: 03/16/2004 Sheet 1 of 1  
2244 Walnut Grove Avenue, Rosemead, CA 91770 Unit: 2
2. Plant: San Onofre Nuclear Generating Station Traveler: N/A  
P.O. Box 128, San Clemente, CA 92674-0128
3. Work Performed by: Southern California Edison Company MO/CWO: 02050522  
Address: 2244 Walnut Grove Ave, Rosemead, Ca. 91770  
Type Code Symbol Stamp: N/A
4. Identification of System: Safety Injection System Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 2, 1974 Edition; Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition; No Addenda\*  
\* work performed during second ISI interval
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
16" NPS Flanged Connection	Bechtel	N/A	N/A	Heat No. HJ-052	1979	—	Yes
All-Thread Studs 1-8 x 6 (16)	Mackson, Inc.	Heat No. 19639	N/A	RSO-1359-02 SA193, B7	2000	Replacement	No
1-8 Heavy Hex Nuts (30)	Mackson, Inc.	Heat No. 7240626	N/A	RSO-0249-03 SA194, 2H	2002	Replacement	No
1-8 Heavy Hex Nuts (2)	Mackson, Inc.	Heat No. S41165	N/A	RSO-0530-02 SA194, 2H	2000	Replacement	No

7. Description of Work:  
Replaced (16) each flange studs and (32) each flange nuts with in-kind replacement bolting material on the flanged connection immediately down stream of valve S21204MU088. Flange studs were cut from all-thread stock material.
8. Tests Conducted: System Functional Pressure Test @ NOP/NOT per AR assignment 031000377-16  
☐ Other ☐ Exempt

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 inc., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. Remarks: None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: *Al Mil* supervising Date: 4/20, 2004  
Owner or Owner's Designee, Title ASME Codes  
Engr

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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 3/28/03 to 4/16/04, 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.

*Shawn D. Shotton* Commissions CA 1574 "N# I" California  
Inspector's Signature (National Board, State, Province, and Endorsements)  
Date April 21 2004

**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: N  
MO: 02061611000  
Rspec: GEN-166 R1  
PID: N/A  
N5: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
3. Work Performed by: Southern California Edison Company
4. Identification of System: N/A - Spare
5. (a) Applicable Construction Code: ASME Section III, NC (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	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 3/8" - 8 All-Thread Stud (12)	Mackson, Inc	Ht. #12685, Ht. Code FK7	N/A	RSO-1598-02, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8" - 8 All-Thread Stud (8)	Mackson, Inc	Ht. #11503850, Ht. Code AQQ	N/A	RSO-0550-03, SA193 B7 (CR-3005-96)	N/A	Replacement	No

**7. Description of Work:**

(60) spare replacement studs (for the inlets of the main steam safety valves) were manufactured by cutting to length and then machining as necessary from all-thread stock. Twelve pieces of all-thread stock (RSO-1598-02) were cut into studs (36 each, 9" lengths) and eight pieces of all-thread stock (RSO-0550-03) were cut into studs (24 each, 9" lengths), with the required markings being transferred to the cut pieces in accordance with Repair Specification GEN-166 Revision 1 and DWG SO23-507-3-17, DCN #2 and DCN #7.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: CR-3005-96 reconciles the replacement studs which was certified to ASME III, NC (Class 2), 1989 Ed. No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 9/3/03

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/9/02 to 9/3/03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date Sept. 3, 2003

# 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  
Date: 04/15/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 02061982001
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" 600# Pressure Seal Gate Valve	Anchor/Darling	2N-681	N/A	S21301MU017	1976	---	Yes
Bonnet	Flowserve	77908-1	N/A	RSO-1908-03, SA350 LF2	2003	Replacement	Yes

## 7. Description of Work:

Replaced the bonnet in valve (s/n 2N-681) located in plant position S21301MU017 with an in-kind replacement bonnet.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
See: AR 020601930-15

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



FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 5/13/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period February 16, 2004 to May 15, 2004, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

"N+I" 1574 California

National Board, State, Province, and Endorsements

Date

May 14, 2004

# 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 Date: 02/26/04 Sheet 1 of 1  
2244 Walnut Grove Avenue, Rosemead, CA 91770 Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128 Traveler: N/A
3. Work Performed by: Southern California Edison Company MO/CWO: 02070031  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
Type Code Symbol Stamp N/A  
Authorization No: N/A
4. Identification of System: Chemical & Volume Control (BGA/1208) Expiration Date: N/A
5. (a) Applicable Construction Code: (Valve) ASME III, Class 2, 1971 Edition; Summer 1973 Addenda  
(Spindle) ASME III, Class 2, 1989 Edition; No Addenda
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped Yes/No
1-1/2" 1500# Angle/Drain Valve	Control Components	35208-1-1	N/A	2LV0110A	1984	—	Yes
Spindle (Plug)	Control Components	174805; Heat Code 289D	N/A	RSO-1054-03 (SB-637, N07718)	2003	Replacement	Yes

7. Description of Work:  
Valve spindle was replaced during overhaul of the pressurizer level control valve in plant position 2LV0110A.

8. Tests Conducted: System Leakage Pressure Test @ NOP/NOT (ref. AR assignment 011200184-04)  
☐ Other ☐ Exempt

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

# FORM NIS-2 (back)

9. Remarks: N/A  
  
  
 (Applicable Manufacturer's Data Reports to be attached)

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 4/30, 19 2004

## 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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 8/7/03 to 4/23/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions N E I California 1574  
 Inspector's Signature (National Board, State, Province, and Endorsements)

Date May 27, 19 2004  
[Signature]

# 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  
Date: 05/13/04  
Unit: 2  
MO: 02080997000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class I, 1971 Edition, Summer 1971 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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	CE	71270-2	22219	S21301ME088P	1976	---	Yes
1 1/2" x 14 1/4" Manway Stud	Energy Steel & Supply	Ht. #96894, Lot Code DUE5	N/A	RSO-1144-97, SA540 B24 Cl. 3 (RoR-025-03)	N/A	Replacement	No
1 1/2"-8N Hex Nut	ABB Combustion Engineering	Ht. #8998461 H318, Trace Code Z17	N/A	RSO-1596-98, SA193 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 3H and nut number 3H, which were replaced with in-kind replacements in accordance with RRP GEN-205P. A VT-1 examination was performed on the replacement bolting with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: RoR-025-03 reconciles the replacement stud which was certified to ASME III-1, 1989 Edition, No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed:

[Signature]  
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date:

5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/30/03 to 5/26/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I

California

1574

National Board, State, Province, and Endorsements

Date

May 28, 2004

# 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 Date: 05/25/04  
2244 Walnut Grove Avenue Unit: 2  
Rosemead, California 91770 MO: 02080998000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company Type Code Symbol Stamp: N/A  
Authorization No: N/A
4. Identification of System: Reactor Coolant Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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	22218	S21301ME089P	1976	—	Yes
1 1/2" x 14 1/4" Primary Manway Stud (2)	Energy Steel & Supply	Ht. #96894 Lot Code DUE5	N/A	RSO-1144-97, SA540 B24 Cl. 3 (RoR-025-03)	N/A	Replacement	No
1 1/2" x 14 1/4" Primary Manway Stud (2)	Energy Steel & Supply	Ht. #96894, Lot Code DUE5	N/A	RSO-1116-97, SA540 B24 Cl. 3 (RoR-025-03)	N/A	Replacement	No
1 1/2"-8N Primary Manway Nut (4)	Nova Machine Products	Ht. #73265-32-2, Tr. Code RZW	N/A	RSO-1076-00, SA193 B7	N/A	Replacement	No

## 7. Description of Work:

Steam generator (S21301ME089P) manway cover bolting (one stud and one nut) was replaced in-kind at hole locations: hole #4 on the hot leg; hole #12 on the cold leg; hole #2 on the hot leg; and hole #8 on the hot leg (total 4 studs and 4 nuts). A VT-1 of the replacement studs and nuts was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT

VT-2 performed per Procedure SO23-XVII-3.1.1

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

## FORM NIS-2 (back)

9. Remarks: RoR-025-03 reconciles the replacement manway cover studs which were certified to ASME III-1, 1989 Edition, No Addenda.

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

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/18/04

### 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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/30/03 to 5/26/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

NEI

California

1574

National Board, State, Province, and Endorsements

Date May 23, 2004

# 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, CA 91770  
Date: 02/17/04  
Sheet 1 of 1  
Unit: 2/3
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 02110034000  
Type Code Symbol Stamp N/A
4. Identification of System: Chemical & Volume Control (BGA/1208)  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III-2, 1974 Edition; Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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 Stamp Yes/No
1-1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0008	N/A	Removed From Plant Position 2PSV9226	1985	-----	Yes
Disc Insert	Anderson Greenwood	Ht. No. 1810-0-1023	N/A	RSO-0439-01	2001	Replacement	No
Spindle	Crosby	Ht. No. 1810-7-1065	N/A	RSO-02-P-1836-82	1982	Replacement	No
Nozzle	Crosby	N91243-42-0044	N/A	RSO-2053-92	1992	Replacement	No
Spring	Crosby	NX-3055-0073	N/A	RSO-3956-85	1985	Replacement	No
Spring Washers	Crosby	N90982-55-0504	N/A	RSO-3956-85	1985	Replacement	No

7. Description of Work:  
Relief valve removed from plant position 2PSV9226 (on MO 01071546000) was rebuilt and returned to stock.

8. Tests Conducted: Not required for this work scope. Valve will be tested after reinstallation into the plant.  
[ ] Other [ ] Exempt

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



FORM NIS-2 (back)

9. Remarks: N/A

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 3/2, 18 2004

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 HSBCT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 9/11/03 to 2/23/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions "N & I" 1574 California  
(National Board, State, Province, and Endorsements)

Date May 26, 19 2004

# 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 Date: 04/19/04 Sheet 1 of 1  
2244 Walnut Grove Avenue, Rosemead, CA 91770 Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128 Traveler: N/A
3. Work Performed by: Southern California Edison Company MO/CWO: 02121193000  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. Identification of System: Chemical & Volume Control (1208/BGA) Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 2, 1971 Edition; Summer 1973 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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# Spring Loaded Check Valve	Valcor	S/N 3	N/A	S21208MU172	1985	*****	Yes
Valve Disc Assembly	Valcor	S/N RG-1	N/A	RSO-0062-01 (Part No. V52045-09-3)	2000	Replacement	Yes

7. Description of Work:  
The valve located in plant position S21208MU172 was found to be leaking by. Valve was disassembled and the disc assembly was replaced. The valve was reassembled.
8. Tests Conducted: No Pressure Test performed. Replacement item exempted per IWA-4540(b)(10) 1998 Ed., 2000 Add.  
☐ Other ☐ Exempt

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

FORM NIS-2 (back)

9. Remarks: N/A  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:

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

Date: 5/28, 2004

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 HSBCT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/10/03 to 5/26/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions N & I 1574 California  
(National Board, State, Province, and Endorsements)

Date

May 28 2004

# 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 Date: 05/26/04  
2244 Walnut Grove Avenue Unit: 2  
Rosemead, California 91770 CWO: 03021052000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company Type Code Symbol Stamp: N/A  
Authorization No: N/A
4. Identification of System: Reactor Coolant Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (SG); Class 1, 1989 Edition, No Addenda (tube sleeves); Code Case: N-20
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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	22218	S21301ME089P	1976	---	Yes
Weld-In Tube Sleeves, hot leg*	Inco Alloys/Valinox	Ht. Code NX9026, Lot 604	N/A	RSO-0488-04, SB163 N06690	N/A	Repaired / Replacement	No

\* See attached SONGS-2 SLEEVING LIST (REV. 00) S/G 89 Feb/Mar 2004 2C13 (4 pages) for tube locations (row/column) of installed tubesleeves.

## 7. Description of Work:

Westinghouse/Framatome, a qualified contractor, performed tubesleaving in the steam generator channelheads under the Site ASME Section XI Program. The work group responsible for coordinating and overseeing this work was Project Management and Engineering Support Special Projects (SG/ISI). A visual examination (VT-1) of the steam generator tube sleeve welds was performed satisfactorily.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 6/1/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/1/04 to 6/1/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

CA 1574 N & I (California)  
National Board, State, Province, and Endorsements

Date June 1, 2004

# 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  
Date: 05/26/04  
Unit: 2  
CWO: 03021053000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (SG); Class 1, 1989 Edition, No Addenda (tube sleeves); Code Case: N-20
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Weld-In Tube Sleeves, hot leg*	Inco Alloys/Valinox	Ht. Code NX9026, Lot 604	N/A	RSO-0488-04, SB163 N06690	N/A	Repaired / Replacement	No

\* See attached SONGS-2 SLEEVE LIST (REV. 00) S/G 88 Feb/Mar 2004 2C13 (5 pages) for tube locations (row/column) of installed tubesleeves.

## 7. Description of Work:

Westinghouse/Framatome, a qualified contractor, performed tubesleeving in the steam generator channelheads under the Site ASME Section XI Program. The work group responsible for coordinating and overseeing this work was Project Management and Engineering Support Special Projects (SG/ISI). A visual examination (VT-1) of the steam generator tube sleeve welds was performed satisfactorily.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/17/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

"NFI"

California

1574

National Board, State, Province, and Endorsements

Date May 28, 2004

# 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  
Date: 05/25/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021546000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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	S21301ME088	1976	—	Yes
1 1/2" x 9" Manway Stud (4)	Westinghouse	Ht. #12425	N/A	RSO-0036-03, SA540 B24 Cl. 3	N/A	Replacement	No
1 1/2"-8N Manway Stud Nut (4)	ABB Combustion Engineering	Ht. #8998461 H318, Tr. Code Z17	N/A	RSO-1596-98, SA193 B7	N/A	Replacement	No

## 7. Description of Work:

Replaced (4) each steam generator (S21301ME088) manway cover studs and (4) each nuts at hole locations #13, #6, #5, and #1 with in-kind replacement bolting in accordance with Repair Replacement Plan GEN-205s.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
See: AR 031000377-21

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



FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/10/04 to 5/28/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I California 1574  
National Board, State, Province, and Endorsements

Date May 28, 2004

# 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  
Date: 05/25/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021547000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A
4. Identification of System: Reactor Coolant  
Expiration 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: 1995 Edition, 1996 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	22218	S21301ME089	1976	---	Yes
1 1/2" x 9" Manway Stud (2)	Westinghouse	Ht. #12425	N/A	RSO-0036-03, SA540 B24 Cl. 3	N/A	Replacement	No
1 1/2"-8N Manway Stud Nut	ABB Combustion Engineering	Ht. #8998461 H318, Tr. Code Z17	N/A	RSO-1596-98, SA193 B7	N/A	Replacement	No
1 1/2"-8N Manway Stud Nut	CE	Ht. #73265-32-2, Tr. Code RZW	N/A	RSO-1076-00, SA193 B7	N/A	Replacement	No

## 7. Description of Work:

Replaced (2) each steam generator (S21301ME089) manway cover studs and (2) each nuts at hole locations #13 and #8 with in-kind replacement bolting in accordance with Repair Replacement Plan GEN-205s.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
Sec: AR 031000377-22

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/10/04 to 5/28/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I California 1574  
National Board, State, Province, and Endorsements

Date

May 28, 2004

# 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 Date: 04/19/04 Sheet 1 of 1  
2244 Walnut Grove Avenue, Rosemead, CA 91770 Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128 Traveler: N/A
3. Work Performed by: Southern California Edison Company MO/CWO: 03021771001  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. Identification of System: Auxillary Feedwater (1305/ALA) Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 2, 1974 Edition; Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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# Y-Globe Lift Check Valve	Atwood-Morrill	1-16188-01	N/A	S21305MU124	1991	*****	Yes
Valve Poppet	Atwood-Morrill	S/N 1	N/A	RSO-1491-00 (Part No. 32462-330-2791-121)	2000	Replacement	Yes

7. Description of Work:  
The valve located in plant position S21305MU124 was found to be leaking by. Valve was disassembled and the poppet assembly was replaced. The valve was reassembled.
8. Tests Conducted: System Leakage Pressure Test @ NOP/NOT in accordance with AR assignment 030600950-10.  
☐ Other ☐ Exempt

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

FORM NIS-2 (back)

9. Remarks: N/A  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

Date: 5/28, 2004

Supervising ASME Codes Engr.  
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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 2/23/04 to 5/28/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions N & I California 1574  
(National Board, State, Province, and Endorsements)

Date May 28 2004

# 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  
Date: 6/3/2004  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021866000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0030	N/A	2PSV8405	1977	Replacement	Yes
1-3/8" x 9" Inlet Studs (12)	Mackson, Inc	Heat No. 12685; Heat Code FK7	N/A	RSO-1598-02, SA193 B7 (fabbbed on MO 02061611)	N/A	Replacement	No
1-3/8" - 8 Inlet Nuts (12)	Mackson, Inc	Heat No. M82952; Heat Code AJL	N/A	RSO-1986-03, SA194, Gr. 7	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8405. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

(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 Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 6/3/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/15/04 to 6/2/04, 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

N & I

California

1574

National Board, State, Province, and Endorsements

Date

6/3/04

# 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  
Date: 6/3/2004  
Unit: 2  
Traveler N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021879000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0031	N/A	2PSV8408	1977	Replacement	Yes
1-3/8" x 9" Inlet Studs (12)	Mackson, Inc	Heat No. 12685; Heat Code FK7	N/A	RSO-0550-03, SA193 B7 (fabbbed on MO 02061611)	N/A	Replacement	No
1-3/8"- 8 Inlet Nuts (4)	Nova Machine Products	Heat No. 69161; Heat Code. LUW	N/A	RSO-0234-99, SA194, Gr. 7	N/A	Replacement	No
1-3/8"- 8 Inlet Nuts (4)	Nova Machine Products	Heat No. 10150; Heat Code. RKW	N/A	RSO-0916-00, Sa194, Gr. 7	N/A	Replacement	No
1-3/8"- 8 Inlet Nuts (4)	Mackson, Inc	Heat No. M82952; Heat Code. AGQ	N/A	RSO-0530-02, SA194, Gr. 7	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8408. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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



FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

(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 Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/3/04  
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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/15/04 to 6/2/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions N & I California 1574  
Inspector's Signature National Board, State, Province, and Endorsements

Date 6/3/04

# 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  
Date: 6/3/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021898000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0019	N/A	2PSV8411	1977	Replacement	Yes
1-1/8" - 4-3/4" Bonnet Studs (2)	Crosby Valve & Gage	S/N 91091; Trace Code Q197-4	N/A	RSO-1139-03	N/A	Replacement	No
1-3/8" x 9" Inlet Studs (11)	Mackson, Inc	Heat No. 11503859; Heat Code. AQG	N/A	RSO-0550-03, SA193 B7 (fabbed on MO 02061611)	N/A	Replacement	No
1-3/8" x 9" Inlet Studs (1)	Mackson, Inc	Heat No. 12685; Heat Code. FK7	N/A	RSO-1598-02 (fabbed on MO 02061611)	N/A	Replacement	No
1-3/8" - 8 Inlet Nuts (8)	Mackson, Inc	Heat No. M82952; Heat Code. AJL	N/A	RSO-1986-03; SA194, Gr. 7	N/A	Replacement	No
1-3/8" - 8 Inlet Nuts (4)	Mackson, Inc	Heat No. M82952; Heat Code. AGQ	N/A	RSO-0530-02; SA194, Gr. 7	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8411. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind. Two (2) bonnet studs were replaced in accordance with Anderson Greenwood Crosby Form NVR-1.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

## FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

(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 Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 6/3/04

### 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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/6/04 to 6/2/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I

California 1574

National Board, State, Province, and Endorsements

Date June 3, 2004

# 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  
Date: 6/3/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021929000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0034	N/A	2PSV8413	1977	Replacement	Yes
1-3/8" x 9" Inlet Studs (12)	Mackson, Inc	Ht. #0101075 Ht. Code AOB	N/A	SA193 B7 (RoR-002-03), Fabb'd on MO 02061062	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Mackson, Inc	Ht. #M82952, Ht. Code AJL	N/A	RSO-1986-03, SA194 Gr. 7 (RoR-012-03)	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8413. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

(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 Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

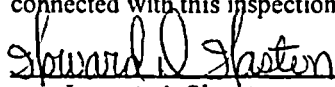
Date: 6/3/04

Ownér 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 HSBCT, of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/15/04 to 6/3/04, 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

"N # I"

California 1574

National Board, State, Province, and Endorsements

Date June 3, 2004

# 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  
Date: 6/3/2004  
Unit: 2  
Traveler N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021936000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0021	N/A	2PSV8414	1977	Replacement	Yes
1-3/8" x 9" Inlet Studs (12)	Mackson, Inc	Ht. No. 11503850; Ht. Code. AQG	N/A	RSO-0550-03; SA193, B7	N/A	Replacement	No
1-3/8"-8 Inlet Heavy Hex Nuts (10)	Nova Machine Products	Ht. No. 10150; Ht. Code. RKW	N/A	RSO-0916-00; SA194, Gr. 7	N/A	Replacement	No
1-3/8"-8 Inlet Heavy Hex Nuts (2)	Mackson, Inc	Heat No. M82952; Ht. Code. AQG	N/A	RSO-0530-02; SA194, Gr. 7	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8414. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

(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 Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 6/3/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/15/04 to 6/2/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I

California

1574

National Board; State; Province, and Endorsements

Date

6/3/04

# 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  
Date: 06/03/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03021941000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0024	N/A	2PSV8415	1977	Replacement	Yes
1 3/8" x 9" All Thread Stud (12 ea)	Mackson, Inc	Ht. #12685, Ht. Code FK7	N/A	SA193 Gr.B7, Fabbbed on MO 02061062 (RoR-002-03)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12 ea)	Mackson, Inc	Ht. #M82952, Ht. Code AJL	N/A	RSO-1986-03, SA194 Gr. 7 (RoR-012-03)	N/A	Replacement	No
1 1/8" - 4 3/4" Bonnet Stud (1 ea)	Crosby Valve & Gage	S/N N 91091, Tr. Code Q197-4	N/A	RSO-1139-03, SA193 B7 (per NPV-1)	N/A	Replacement	No

## 7. Description of Work:

Replacement PSV was rotated from stock and installed in plant position 2PSV8415. Twelve (12) inlet studs and twelve (12) nuts were replaced, in-kind. (1) bonnet stud was replaced in accordance with Anderson Greenwood Crosby Form NVR-1.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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



FORM NIS-2 (back)

9. Remarks: Replacement Studs were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-002-03.  
Replacement Nuts were certified to ASME III-2 1989 Ed., No Addenda as permitted by RoR-012-03.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 6/3/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/6/04 to 6/2/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I

California 1574

National Board, State, Province, and Endorsements

Date June 3, 2004

# 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, CA 91770  
**Date:** 04/09/04 **Sheet** 1 of 1  
**Unit:** 2
2. **Plant:** San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
**Traveler:** N/A
3. **Work Performed by:** Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 03060709; 04021237
4. **Identification of System:** Reactor Coolant System (BBA/1201)  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)  
ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)  
Snubber Fabrication/Examination - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda  
Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)  
(b) **Applicable Edition of Section XI Utilized for Repairs or Replacements:** 1995 Edition; 1996 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 543 KIP(incl. pins)	Paul Monroe	PD18593-753	N/A	S2RCE89H001	1978	Replaced	No
Hydraulic Snubber 625 KIP	Lisega	03617163-1	N/A	RSO-2684-03	2003	Replacement	No
Hydraulic Snubber 543 KIP(incl. pins)	Paul Monroe	PD18593-752	N/A	S2RCE89H002	1978	Replaced	No
Hydraulic Snubber 625 KIP	Lisega	03617163-3	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pins (2 Ea./ Wall Side) (4" diam. x 14-1/8"	Lisega	Heat No. R0634-10	N/A	RSO-0194-04	2003	Replacement	No
Pivot Pins (2 Ea./ SG Side) (4" diam. x 22-7/8"	Lisega	Heat No. R0634-10	N/A	RSO-0194-04	2003	Replacement	No

7. **Description of Work:**  
The two large bore Paul Monroe hydraulic snubbers were removed from Steam Generator S21301ME089 and replaced with Lisega large bore hydraulic snubbers. Snubber replacement included replacement of both the wall side and SG side pivot pins with pins supplied by Lisega. A VT-3 visual examination was performed of the completed installations. To allow the snubber end paddles to clear the snubber end brackets, the edges of the end brackets were removed by grinding. A VT-1 visual examination was performed on the end brackets after grinding.
8. **Tests Conducted:** N/A

FORM NIS-2 (back)

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pins.  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair & 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

Signed: [Signature]

Date: 5/28, 2004

Supervising ASME Codes Engr.  
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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspector's Signature

Commissions N&I 1574 California  
(National Board, State, Province, and Endorsements)

Date May 28 2004

# 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, CA 91770  
**Date:** 04/09/04 **Sheet** 1 of 1  
**Unit:** 2
2. **Plant:** San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
**Traveler:** N/A
3. **Work Performed by:** Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 03060726; 04021231
4. **Identification of System:** Reactor Coolant System (BBA/1201)  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)  
ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)  
Snubber Fabrication/Examination - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda  
Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)  
(b) **Applicable Edition of Section XI Utilized for Repairs or Replacements:** 1995 Edition; 1996 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 543 KIP (incl. pins)	Paul Monroe	PD18593-750	N/A	S2RCE88H001	1978	Replaced	No
Hydraulic Snubber 625 KIP	Lisega	03617163-2	N/A	RSO-2684-03	2003	Replacement	No
Hydraulic Snubber 543 KIP (incl. pins)	Paul Monroe	PD18593-751	N/A	S2RCE88H002	1978	Replaced	No
Hydraulic Snubber 625 KIP	Lisega	03617163-4	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pins (2 Ea./ Wall Side) (4" diam. x 14-1/8")	Lisega	Heat No. R0634-10	N/A	RSO-0194-04	2003	Replacement	No
Pivot Pins (2 Ea./ SG Side) (4" diam. x 22-7/8")	Lisega	Heat No. R0634-10	N/A	RSO-0194-04	2003	Replacement	No

7. **Description of Work:**  
The two large bore Paul Monroe hydraulic snubbers were removed from Steam Generator S21301ME088 and replaced with Lisega large bore hydraulic snubbers. Snubber replacement included replacement of both the wall side and SG side pivot pins with pins supplied by Lisega. A VT-3 visual examination was performed of the completed installations. To allow the snubber end paddles to clear the snubber end brackets, the edges of the end brackets were removed by grinding. A VT-1 visual examination was performed on the end brackets after grinding.
8. **Tests Conducted:** N/A

FORM NIS-2 (back)

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pins.  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair & 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

Signed:

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

Date: 5/28, 200 4

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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions N#1 1574 California  
(National Board, State, Province, and Endorsements)

Date May 28 200 4

## 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, CA 91770  
**Date:** 03/22/04 **Sheet** 1 of 1
2. **Plant:** San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
**Unit:** 2  
**Traveler:** N/A
3. **Work Performed by:** Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 03060730
4. **Identification of System:** Reactor Coolant System (BBA/1201)  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)  
ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)  
Snubber Fabrication/Examination - ASME III-NF(Class 1), 1974 Edition, Summer 1975 Addenda  
Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda  
Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)
- (b) **Applicable Edition of Section XI Utilized for Repairs or Replacements:** 1995 Edition; 1996 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 826 KIP (incl. pivot pin)	Paul Monroe	PD16154-255	N/A	S2RCP01H001	1978	Replaced	No
Hydraulic Snubber 1093 KIP	Lisega	03617173-1	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pin (5" diam. x 22-3/8")	Lisega	Heat No. 412992	N/A	RSO-0194-04	2003	Replacement	No

7. **Description of Work:**  
The large bore Paul Monroe hydraulic snubber was removed from Reactor Coolant Pump S21201MP002 and replaced with a Lisega large bore hydraulic snubber. Snubber replacement included replacement of the structural side pivot pin with a pin supplied by Lisega. In addition, to facilitate the removal/reinstallation of the pump side pivot pins, the pins were drilled (and tapped) to accommodate an eyebolt. A VT-3 visual examination was performed of the completed installation.
8. **Tests Conducted:** N/A  
☐ Other ☐ Exempt

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

## FORM NIS-2 (back)

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pin.

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

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/27/04

### 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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, 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

N # I

California

1574

National Board, State, Province, and Endorsements

Date

May 28, 2004

# 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, CA 91770  
**Date:** 04/09/04 **Sheet** 1 of 1
2. **Plant:** San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
**Unit:** 2  
**Traveler:** N/A
3. **Work Performed by:** Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 03060731
4. **Identification of System:** Reactor Coolant System (BBA/1201)  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)

ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)

Snubber Fabrication/Examination - ASME III-NF(Class 1), 1974 Edition, Summer 1975 Addenda

Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda

Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)

(b) **Applicable Edition of Section XI Utilized for Repairs or Replacements:** 1995 Edition; 1996 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 826 KIP (incl. pivot pin)	Paul Monroe	PD16154-257	N/A	S2RCP02H001	1978	Replaced	No
Hydraulic Snubber 1093 KIP	Lisega	03617173-2	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pin (5" diam. x 22-3/8")	Lisega	Heat No. 412992	N/A	RSO-0194-04	2003	Replacement	No

## 7. Description of Work:

The large bore Paul Monroe hydraulic snubber was removed from Reactor Coolant Pump S21201MP002 and replaced with a Lisega large bore hydraulic snubber. Snubber replacement included replacement of the structural side pivot pin with a pin supplied by Lisega. In addition, to facilitate the removal/reinstallation of the pump side pivot pins, the pins were drilled (and tapped) to accommodate an eyebolt. A VT-3 visual examination was performed of the completed installation.

8. **Tests Conducted:** N/A  
☐ Other ☐ Exempt

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



FORM NIS-2 (back)

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pin.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 5/27/04  
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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions N # I California 1574  
Inspector's Signature National Board, State, Province, and Endorsements

Date May 28, 2004

## 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, CA 91770  
**Date:** 04/09/04 **Sheet** 1 of 1
2. **Plant:** San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
**Unit:** 2  
**Traveler:** N/A
3. **Work Performed by:** Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 03060732
4. **Identification of System:** Reactor Coolant System (BBA/1201)  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)  
ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)  
Snubber Fabrication/Examination - ASME III-NF(Class 1), 1974 Edition, Summer 1975 Addenda  
Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda  
Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)  
(b) **Applicable Edition of Section XI Utilized for Repairs or Replacements:** 1995 Edition; 1996 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 826 KIP (incl. pivot pin)	Paul Monroe	PD16154-258	N/A	S2RCP03H001	1978	Replaced	No
Hydraulic Snubber 1093 KIP	Lisega	03617173-3	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pin (5" diam. x 22-3/8")	Lisega	Heat No. 412992	N/A	RSO-0194-04	2003	Replacement	No

7. **Description of Work:**

The large bore Paul Monroe hydraulic snubber was removed from Reactor Coolant Pump S21201MP003 and replaced with a Lisega large bore hydraulic snubber. Snubber replacement included replacement of the structural side pivot pin with a pin supplied by Lisega. In addition, to facilitate the removal/reinstallation of the pump side pivot pins, the pins were drilled (and tapped) to accommodate an eyebolt. A VT-3 visual examination was performed of the completed installation.

8. **Tests Conducted:** N/A  
☐ Other ☐ Exempt

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

**FORM NIS-2 (back)**

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pin.

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

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/27/04

**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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, 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

N & I

California

1574

National Board, State, Province, and Endorsements

Date May 28, 2004

# 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, CA 91770  
Date: 04/09/04 Sheet 1 of 1  
Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 03060734
4. Identification of System: Reactor Coolant System (BBA/1201)  
Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: Snubber Design - ASME III-NF(Class 1), 1977 Edition, No Addenda  
Snubber Materials - ASME II & III-NF(Class 1), 1977 Edition (SA487, CA6NM)  
ASME II & III-NF(Class 1), 1980 Edition (SA299 & SA193, B7)  
Snubber Fabrication/Examination - ASME III-NF(Class 1), 1974 Edition, Summer 1975 Addenda  
Pivot Pin Design - ASME III-NF(Class 1), 1974 through 1989 Edition, with 1991 Addenda  
Pivot Pin Material - ASME II & III-NF(Class 1), 1977 Edition (SA564, Gr. 630)  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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 826 KIP (incl. pivot pin)	Paul Monroe	PD16154-256	N/A	S2RCP04H001	1978	Replaced	No
Hydraulic Snubber 1093 KIP	Lisega	03617173-4	N/A	RSO-2684-03	2003	Replacement	No
Pivot Pin (5" diam. x 22-3/8")	Lisega	Heat No. 412992	N/A	RSO-0194-04	2003	Replacement	No

7. Description of Work:  
The large bore Paul Monroe hydraulic snubber was removed from Reactor Coolant Pump S21201MP004 and replaced with a Lisega large bore hydraulic snubber. Snubber replacement included replacement of the structural side pivot pin with a pin supplied by Lisega. In addition, to facilitate the removal/reinstallation of the pump side pivot pins, the pins were drilled (and tapped) to accommodate an eyebolt. A VT-3 visual examination was performed of the completed installation.
8. Tests Conducted: N/A  
☐ Other ☐ Exempt

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

## FORM NIS-2 (back)

9. Remarks: In accordance with IWA-4224.3, Report of Reconciliation RoR-010-03 was issued to address the use of a different material for the replacement load pin.

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

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No? N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 5/27/04

### 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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/28/03 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N # I

California 1574

National Board, State, Province, and Endorsements

Date May 28, 2004

# 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  
Date: 04/21/04  
Unit: 2  
Traveler: N/A  
MO: 03070217000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" 1515# Swing Check Valve	Anchor/Darling	E-3247-2-1	N/A	S21201MU976	1984	—	Yes
Disc	Anchor/Darling	S/N 17, Ht. #52950	N/A	RSO-4720-85, SA182 F316L	1985	Replacement	Yes

## 7. Description of Work:

Replaced the disc in valve (s/n E-3247-2-1) in plant position S21201MU976 with an in-kind replacement disc in accordance with ASME XI Data Flag-0252. The valve counter weight was removed in accordance with ECP 030100336-44. A VT-1 examination was performed on the plug studs and nuts with satisfactory results.

8. Tests Conducted: N/A per IWA-4540(b)(10) 1998 Ed., 2000 Add.

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

## FORM NIS-2 (back)

9. Remarks: None.

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

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/28/04

### 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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/7/03 to 5/26/04, 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

"N # I"

California 1574

National Board, State, Province, and Endorsements

Date: May 28, 2004

# 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  
Date: 04/21/04  
Unit: 2  
MO: 03070218000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" 1515# Swing Check Valve	Anchor/Darling	E-3247-2-2	N/A	S21201MU977	1984		Yes
5/8" x 3" All-Thread Stud (3 ea.)	Cardinal Industrial Products	Ht. #8642933, Ht. Code H2	N/A	RSO-0120-96, SA564 630-1100	N/A	Replacement	No

## 7. Description of Work:

Replaced (3) each plug studs for valve (s/n E-3247-2-2) in plant position S21201MU977. A VT-1 examination revealed indications on (3) each plug studs and they were replaced with in-kind replacement studs in accordance with ASME XI Data Flag-0252. A VT-1 examination was performed on the replacement plug studs with satisfactory results. The valve counter weight was removed in accordance with ECP 030100336-44.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
VT-2 performed per Procedure SO23-XVII-3.1.1

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



## FORM NIS-2 (back)

9. Remarks: None.

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


### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 5/27/04  
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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/21/03 to 5/27/04, 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 N & I California 1574  
Inspector's Signature National Board, State, Province, and Endorsements

Date May 28, 2004

# 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, CA 91770  
Date: 04/19/04 Sheet 1 of 1  
Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 03080453001  
Type Code Symbol Stamp N/A
4. Identification of System: Containment Spray (1206/BKA)  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition; Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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" NPS Sch 20 Pipe Spool (Flanged)	Pullman, Inc.	N-6013	N/A	S2-CS-041-033	1978	*****	Yes
7/8" x 5-1/2" Long Stud Bolts (24)	Mackson, Inc.	Heat No. S20751	N/A	RSO-1137-03	N/A	Replacement	No
7/8"-9 Heavy Hex Nuts (24)	Mackson, Inc.	Heat No. S44018	N/A	RSO-1137-03	N/A	Replacement	No

7. Description of Work:  
Spool piece 2-CS-041-033 was removed in support of air flow testing of line S21206ML041. During reinstallation of the spool piece (24 each) flange studs and nuts were replaced.
8. Tests Conducted: This portion of the Containment Spray system piping is an open ended system, therefore no System Leakage Pressure Test was performed (ref. IWC-5222).  
☐ Other ☐ Exempt

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

FORM NIS-2 (back)

9. Remarks: The studs were certified to ASME III-2, 1989 Edition, No Addenda which is acceptable per Report of Reconciliation RoR-002-03. The nuts were certified to ASME III-2, 1989 Edition, No Addenda which is acceptable per Report of Reconciliation RoR-003-03.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:

Dr. M. J. J. J.  
Supervising ASME Codes Engr.  
Owner or Owner's Designee, Title

Date:

5/27, 2004

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 HSBCT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 2/17/04 to 5/27/04, 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.

Shward D. Shoston  
Inspector's Signature

Commissions N & I California 1574  
(National Board, State, Province, and Endorsements)

Date

May 28, 2004

# 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
- Date: 05/06/04  
Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
- MO: 03080879000 04030991000
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
4. Identification of System: Compressed Service Air
- Authorization No: N/A
- Expiration Date: N/A
5. (a) Applicable Construction Code (Original) Pipe/Fittings/Neck Extension: ASME Section III, Class 2, 1974 Ed., S.'74 Add.; Gate Valve: ASME Section III, Class 2, 1974 Ed., S.'75 Add.; Pipe Strap: ASME Section III, Class 2-NF, 1971 Ed., S.'73 Add.;
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" NPS Piping	Bechtel	--	N/A	S22423ML052	N/A	Replaced	Yes
2" NPS Pipe	Dubose Nat. Energy	Heat No. 450964	N/A	RSO-2029-03	N/A	Replacement	No
2" x 2" x 3/4" Reducing Tee	Bechtel	Heat Code UY	N/A	RSO-0517-84	N/A	Replacement	No
2" 90 degree Elbows (3)	Dubose National Energy	Ht. Code FD	N/A	RSO-0063-04	N/A	Replacement	No
2" 150# RF SW Flanges (2)	Dubose Nat. Energy	Ht. #31438	N/A	RSO-0093-04	N/A	Replacement	No
5/8" x 4 Stud Bolts	Mackson, Inc	Ht. #614117	N/A	RSO-0298-03	N/A	Replacement	No
5/8" Hex Nuts	Mackson, Inc	Ht. #7307732	N/A	RSO-1400-02	N/A	Replacement	No
5/8" Hex Nuts	Vitco Nuclear Products	Ht. #5483089	N/A	RSO-0819-95	N/A	Replacement	No
150# Spectacle Blind	Dubose Nat. Energy	Nt. #28084	N/A	RSO-2351-03	N/A	Replacement	No
2" 600# Gate Valve	Henry Vogt Machine	S/N 513-214605	N/A	S22423MU055	1977	Replaced	Yes
2" 800# Gate Valve	Framatome (Velan)	S/N 041009-2	N/A	RSO-0372-04 (S22423MU055)	N/A	Replacement	Yes
2" Pipe Strap	Dubose Nat. Energy	Ht. Code JB4311	N/A	RSO-0232-04	N/A	Replacement	No

## 7. Description of Work:

In accordance with design change ECP 030100506-20, the carbon steel process piping and valves were replaced with stainless steel components. The replacement process piping was attached to the neck extension of Containment Penetration #21. In addition, the piping between penetration 21 and check valve S22423MU017 was modified by the installation of two flanges and a spectacle blind. MO 04030991 documents the replacement of the (4) blind flange studs.

Tests Conducted: VT-2 examination performed as part of LLRT (Appendix J Test) in accordance with procedure SO23-3-3.51.8.

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

FORM NIS-2 (back)

9. Remarks: Pipe (SA376, Tp. 304)-RoR-014-03; Reducing Tee & Elbows (SA403, WP304)-RoR-020-03; Flanges (SA182, F316)-RoR-005-03; Spectacle Blind (SA240, Tp 316)-RoR-013-03; Pipe Strap (SA36)-RoR-027-03; Studs (SA193, B7)-RoR-002-03; Nuts (SA194, 2H)-RoR-003-03.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/13/04 to 5/26/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

"N & I"

California

1574

National Board, State, Province, and Endorsements

Date

May 28, 2004

# 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 Date: 02/26/04 Sheet 1 of 1  
2244 Walnut Grove Avenue, Rosemead, CA 91770 Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128 Traveler: N/A
3. Work Performed by: Southern California Edison Company MO/CWO: 03100716  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Chemical & Volume Control (BGA/1208)
5. (a) Applicable Construction Code: (Valve) ASME III, Class 2, 1974 Edition; Summer 1974 Addenda  
(Spindle) ASME III, Class 2, 1989 Edition; No Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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 Stamp Yes/No
2" 600# Globe/Drum Valve	Control Components	36995-1-1	N/A	2PV0201A	1984	-----	Yes
Spindle (Plug)	Control Components	Heat No. 7149EY32	N/A	RSO-1952-99 (SB-637, N07718)	1999	Replacement	Yes

7. Description of Work:  
Valve spindle was replaced during overhaul of the letdown backpressure control valve in plant position 2PV0201A.

8. Tests Conducted: System Leakage Pressure Test @ NOP/NOT (ref. AR assignment 011200184-03)  
☐ Other ☐ Exempt

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

FORM NIS-2 (back)

9. Remarks:

N/A

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:

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

Date:

3/2

192004

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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 10/15/03 to 4/23/04 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions CA 1574 "N&I" California  
(National Board, State, Province, and Endorsements)

Date

4/23/04

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# 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  
Date: 04/15/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 03121003000  
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company  
Authorization No: N/A
4. Identification of System: Compressed Service Air  
Expiration Date: N/A
5. (a) Applicable Construction Code (Original) Pipe/Fittings: ASME Section III, Class 2, 1974 Ed., S.74 Add.; Gate Valve: ASME Section III, Class 2, 1974 Ed., S.75 Add.; Check Valve: ASME Section III, Class 2, 1971 Ed., S.73 Add.;
5. (b) Applicable Edition of Section XI Utilized for Repairs or Rep 1995 Edition, 1996 Addenda
6. Identification of Components Repaired or Replaced and Replacement

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" NPS Piping Subassembly	Gulf Alloy	S2-SA-025-00B	N/A	2-SA-025-B (S22423ML025)	N/A	Replaced	Yes
2" NPS Piping Subassembly	Bechtel	S2-SA-025-00C	N/A	2-SA-025-C (S22423ML025)	N/A	Replaced	Yes
2" NPS Pipe	Dubose Nat. Energy	Heat No. 450964	N/A	RSO-2029-03	N/A	Replacement	No
2" x 2" x 3/4" Reducing Tee	Bechtel	Heat Code UY	N/A	RSO-0517-84	N/A	Replacement	No
2" 150# RF SW Flanges (2)	Dubose Nat. Energy	Heat No. 31438	N/A	RSO-0093-04	N/A	Replacement	No
5/8" x 4 Stud Bolts	Mackson, Inc	Ht. #614117	N/A	RSO-0298-03	N/A	Replacement	No
5/8" Hex Nuts	Mackson, Inc	Ht. #7307732	N/A	RSO-1400-02	N/A	Replacement	No
5/8" Hex Nuts	Vitco Nuclear Products	Ht. #5483089	N/A	RSO-0819-95	N/A	Replacement	No
150# Spectacle Blind	Dubose Nat. Energy	Nt. #28084	N/A	RSO-2351-03	N/A	Replacement	No
2" 600# Gate Valve	Henry Vogt Machine	S/N 510214605	N/A	S22423MU016	N/A	Replaced	Yes
2" 800# Gate Valve	Framatome (Velan)	S/N 011013-2	N/A	RSO-2100-03 (S22423MU016)	N/A	Replacement	Yes
2" 600# Check Valve	Kerotest	S/N TM-1-1	N/A	S22423MU017	N/A	Replaced	Yes
2" 800# Check Valve	Flowserve	S/N 42AYK	N/A	RSO-0440-04 (S22423MU017)	N/A	Replacement	Yes

## 7. Description of Work:

In accordance with design change ECP030100506-20, the carbon steel process piping and valves, extending from the outlet of containment penetration 21 to the outlet of containment isolation valve S22423MU016 (inside containment), were replaced with piping and valves constructed of stainless steel. In addition, the piping between penetration 21 and check valve S22423MU017 was modified by the installation of two flanges and a spectacle blind.

Note: VT-2 examination performed as part of LLRT (Appendix J Test) in accordance with procedure SO23-3-3.51.8.

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**FORM NIS-2 (back)**

9. Remarks: Reports of Reconciliation used: Pipe (SA376, Tp. 304); RoR-014-03; Reducing Tee (SA403, WP304); RoR-020-03; Flanges (SA182, F316); RoR-005-03; Spectacle Blind (SA240, Tp 316); RoR-013-03; Studs (SA193, B7); RoR-002-03; Nuts (SA194, 2H) - RoR-003-03.

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

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:   
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 5/27/04

**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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/18/04 to 5/27/04, 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 N & I California 1574  
National Board, State, Province, and Endorsements

Date May 28, 2004

# 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, CA 91770  
Date: 04/16/04 Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Unit: 2  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 04010279
4. Identification of System: Safety Injection (1204/BHA)  
Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 2, 1974 Edition, Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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
Model 3, Stroke 5 Mechanical Snubber	Pacific Scientific	S/N 5222	N/A	S2SI038H068	1978	*****	No
3/4" x 3.88 Long Load Pins (2)	Grinnel	Heat No. A11649	N/A	RSO-1222-95	1995	Replacement	No

7. Description of Work:  
Load pins were replaced on the snubber located in plant position S2SI038H068. A VT-3 examination was performed after installation of the load pins.

8. Tests Conducted: N/A for this work scope.  
☐ Other ☐ Exempt

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FORM NIS-2 (back)

9. Remarks: N/A  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 5/28, 2004

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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 2/12/04 to 5/26/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions N&I California 1574  
Inspector's Signature (National Board, State, Province, and Endorsements)

Date May 28 2004

# 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  
Date: 04/30/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 04010831000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Containment Spray
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: 1995 Edition, 1996 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" 300# Flow Orifice	Vickery Simms	Ht. #K60356	N/A	2FO9414	N/A	—	No
7/8-9 All-Thread Studs	Mackson, Inc	Ht. #AH8604/Ht. #G6249	N/A	RSO-1450-03/ RSO-0920-03, SA564 Gr. 630 H1100	N/A	Replacement	No
7/8-9 Heavy Hex Nuts (24)	Mackson, Inc	Ht. #A11483	N/A	RSO-0555-04, SA564 Gr. 630 H1100	N/A	Replacement	No

## 7. Description of Work:

Replaced the flange fasteners on flow orifice 2FO9414 per ECP 040100049-6 and in accordance with RRP 040100049-12. (12 each) studs were cut to 6 1/2" lengths from all-thread material with the required markings transferred to the cut pieces in accordance with Repair Specification GEN-239.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: RoR-004-03 reconciles the replacement bolting which was certified to ASME III-2 (NC), 1989 Edition, No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/11/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

"N & I"

California 1574

National Board, State, Province, and Endorsements

Date May 28, 2004

# 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 Date: 04/21/04  
2244 Walnut Grove Avenue Unit: 2  
Rosemead, California 91770 MO: 04011628000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1977 Edition, Winter 1979 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Reactor Vessel	CE	71170	22000	S21101MV001A	1976		Yes
Instrument Flange Adapter Hub Pen. #100	Westinghouse	S/N 003, Ht. #74806	N/A	RSO-2694-03, SA479 Tp 316	N/A	Replacement	No
Instrument Flange Adapter Hub Pen. #95	Westinghouse	S/N 001, Ht. #74806	N/A	RSO-2694-03, SA479 Tp 316	N/A	Replacement	No

## 7. Description of Work:

Replaced existing instrument hubs on penetrations #95 and #100 with modified hubs that are thicker and counterbored deeper to accept longer Hot Junction thermocouples (HJTC) that have in-service induced axial growth. Replaced hubs in accordance with RRP 020701066-74. Note: the removed hubs (ht. #87002 and 87004) were scrapped.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: RoR-024-03 reconciles the replacement instrument hubs which were certified to ASME III-1, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 4/21/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/6/04 to 4/19/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions CA 1574 N&I California  
National Board, State, Province, and Endorsements

Date 4/21/04

# 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, CA 91770  
Date: 04/19/04 Sheet 1 of 1  
Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 04021369000
4. Identification of System: Main Steam (1301/BBA)  
Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 1, 1971 Edition; Summer 1971 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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 (Secondary Side)	Combustion Engineering	71270-2	22219	S21301ME088	1976	Repaired	Yes

7. Description of Work:  
Four (4) holes 10-24 x 1/2" deep were drilled in the secondary side of the Steam Generator to allow the mounting of a temperature probe.
8. Tests Conducted: No System Leakage Pressure Test required for this work scope.  
☐ Other ☐ Exempt

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



FORM NIS-2 (back)

9. Remarks: N/A  
(Applicable Manufacturer's Data Reports to be attached)

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.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

Date: 5/27, 2004

Supervising ASME Codes Engr.  
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 HSBCT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 2/23/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspector's Signature

Commissions N & I

California 1574

(National Board, State, Province, and Endorsements)

Date May 28, 2004

# 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  
Date: 03/06/04  
Unit: 2  
CWO: 04022126000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1 (NB), 1971 Ed., Summer 1971 Addenda.
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Reactor Vessel	CE	71170	22000	S21101MV001A	1976	Repaired	Yes

## 7. Description of Work:

Preliminary PT examination (900234-01) performed on ICI Penetration #97 identified 2 indications at the toe of the J-groove fillet weld where the ICI penetrates below the Reactor Vessel Head. The indications were removed by mechanical means. The indication at 5 o'clock position had 1/4" excavation ground out and the indication at the 6 o'clock position had a 1/8" excavation ground out. The repaired areas were ground to follow the contour of the existing surface and blended into the surrounding surface with approximately a 3 to 1 taper transition. Final PT examination (900234-07) was performed on the repaired surface with satisfactory results. Repairs performed in accordance with Repair Specification 031200551-30 and NCR 040202609 and implemented by Westinghouse Repair Procedure MRS-SSP-1583 (SO23-XXVII-4.113).

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 4/20/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/29/04 to 4/19/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

CA 1574 "N I" California

National Board, State, Province, and Endorsements

Date: April 21, 2004

# 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  
Date: 03/06/04  
Unit: 2  
CWO: 04022170000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1 (NB), 1971 Ed., Summer 1971 Addenda
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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
Reactor Vessel	CE	71170	22000	S21101MV001A	1976	Repaired	Yes

## 7. Description of Work:

Preliminary PT examination (900234-02) performed on ICI Penetration #98 identified 2 areas with indications. The indications were removed by mechanical means. The indication at approximately 325° orientation residing in the J-groove reinforcement weld had 1/8" excavation ground out, and the second area had approximately 7 small linear indications oriented between 45° and 90° (3 to 5 o'clock when looking up from under the head) on the penetration OD near the bottom edge of the penetration and had a 1/8" excavation ground out. The repaired areas were ground to follow the contour of the existing surface and blended into the surrounding surface with approximately a 3 to 1 taper transition. Final PT examination (900234-06) performed on the repaired surface with satisfactory results. Repairs performed in accordance with Repair Specification 031200551-30 and NCR 040202610 and implemented by Westinghouse Repair Procedure MRS-SSP-1583 (SO23-XXVII-4.113).

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer

Date: 4/20/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 02/29/04 to 04/20/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions CA 1574 "NFI" California  
National Board, State, Province, and Endorsements

Date 4/21/04

# 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  
Date: 04/30/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 04030079000
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" Nozzle Type Relief Valve	Crosby Valve & Gage	N59377-00-0002	N/A	2PSV9206	1978	---	Yes
3/4-10 All-Thread Stud	Nova Machine Products	Ht. #55173	N/A	RSO-0062-98, SA193 B7 (RoR-002-03)	N/A	Replacement	No
3/4-10 Heavy Hex Nut (8)	Mackson, Inc	Ht. #S44037, Lot #07121	N/A	RSO-1081-03, SA194 2H (RoR-003-03)	N/A	Replacement	No

## 7. Description of Work:

During swap out of 2PSV9206 on MO 03061993, the inlet flange bolting required replacement. MO 04030079 replaced the inlet flange bolting (8 each nuts and 4 each studs) in accordance with ASME XI Data Flag 0388. (4 each) studs were cut from all-thread stock to 5 1/4" lengths with the required markings transferred to the cut pieces in accordance with Repair Specification GEN-239.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
See: AR 031000377-02

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

FORM NIS-2 (back)

9. Remarks: RoR-002-03 reconciles the replacement studs which were certified to ASME III-2 (NC), 1989 Ed., No Add. RoR-003-03 reconciles the replacement nuts which were certified to ASME III-2 (NC), 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 5/29/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/1/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions "N # 1" California 1574  
National Board, State, Province, and Endorsements

Date May 28, 2004

# 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  
Date: 04/30/04  
Unit: 2  
Traveler: N/A  
MO: 04030084000
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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" x 3" Relief Valve	Crosby Valve & Gage	N59378-00-0003	N/A	2PSV9208	1984	---	Yes
5/8-11 All-Thread Stud	Nova Machine Products	Ht. #99694	N/A	RSO-1811-00, SA 193 B7 (RoR-002-03)	N/A	Replacement	No
5/8-11 Heavy Hex Nut (8)	Mackson, Inc	Ht. #7307732	N/A	RSO-1400-02, SA 194 2H (RoR-003-03)	N/A	Replacement	No

## 7. Description of Work:

During swap out of 2PSV9208 on MO 03022020, the inlet flange bolting required replacement. MO 04030084 replaced the inlet flange bolting (8 each nuts and 4 each studs) in accordance with ASME XI Data Flag 0204. (4 each) studs were cut from all-thread stock to 5" lengths with the required markings transferred to the cut pieces in accordance with Repair Specification GEN-239.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT  
See: AR 031000377-01

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



FORM NIS-2 (back)

9. Remarks: RoR-002-03 reconciles the replacement studs which were certified to ASME III-2 (NC), 1989 Ed., No Add. RoR-003-03 reconciles the replacement nuts which were certified to ASME III-2 (NC), 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 5/18/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/1/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions "N & I" California 1574  
National Board, State, Province, and Endorsements

Date May 28, 2004

# 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, CA 91770  
Date: 3/18/04 Sheet 1 of 1  
Unit: 2
2. Plant: San Onofre Nuclear Generating Station  
P.O. Box 128, San Clemente, CA 92674-0128  
Traveler: N/A
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 04030306  
Type Code Symbol Stamp N/A
4. Identification of System: Main Steam (ABB/1301)  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME III, Class 2-NF, 1974 Edition, Summer 1974 Addenda  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition; 1996 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
PSA 100-6" Mechanical Snubber	Pacific Scientific	Serial No. 197	N/A	S2ST002H001	1977	Replaced	No
PSA 100-6" Mechanical Snubber	Pacific Scientific	Serial No. 2386	N/A	RSO-2688-88	1988	Replacement	No

7. Description of Work:  
The mechanical snubber located in plant position S2ST002H001 was replaced in-kind. Prior to installation, the replacement snubber was functionally tested in accordance with procedures SO23-I-2.39 and SO123-I-6.11. The snubber was subjected to a VT-3 examination after installation.
8. Tests Conducted: No pressure test required for this work scope.  
☐ Other ☐ Exempt

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

FORM NIS-2 (back)

9. Remarks: Replacement snubber is certified to ASME III, Class 1-NF  
(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:

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

Date:

4/20, 2004

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 HSBCT of Hartford, CT have inspected the components described in this Owner's Report during the period 3/5/04 to 4/16/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions CA 1574 "N & I" California  
(National Board, State, Province, and Endorsements)

Date

4/21, 2004

# 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 Date: 05/26/04  
2244 Walnut Grove Avenue Unit: 2  
Rosemead, California 91770 Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station CWO: 04030803000 04030887000  
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company Type Code Symbol Stamp: N/A  
Authorization No: N/A
4. Identification of System: Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Add. (design); ASME Section III, NB-2000, 1998 Edition through 2000 Add. or earlier (plug). Code Case: N-474-1
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1995 Edition, 1996 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	CE	71270-2	22219	S21301ME088P	1976	—	Yes
Welded Plug @ Row 2, Col 62	Framatome	S/N 0061, Ht. Code EA64-3	N/A	RSO-0585-04, N06690	N/A	Replacement	No

## 7. Description of Work:

Installed new in-kind replacement Steam Generator welded tube plug in hot leg location row 2 column 62 of S21301ME088P. Replaced welded plug was removed by machining on MO 04030887. A VT-1 examination was performed on the installed plug with satisfactory results.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: The replacement plug was certified to ASME Section III-1, 1989 Ed. No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed:

*[Signature]*

Supervising ASME Codes Engineer

Date:

5/28/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/12/04 to 5/28/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

*[Signature]*  
Inspector's Signature

Commissions

N & I

California

1574

National Board, State, Province, and Endorsements

Date

May 28, 2004

# 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  
Date: 04/21/04  
Unit: 2  
Traveler: N/A
2. Plant: San Onofre Nuclear Generating Station  
San Clemente, California 92674-0128  
MO: 04032026001
3. Work Performed by: Southern California Edison Company  
Type Code Symbol Stamp: N/A  
Authorization No: N/A
4. Identification of System: Safety Injection and Shutdown Cooling  
Expiration 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: 1995 Edition, 1996 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
SIT #10/WR Level Instrument for SIT T010	P. F. Avery	1156	208	S21204MT010/ 2LT0341	1977	—	Yes

## 7. Description of Work:

Rewelded the "U" straps to the support plate on condensate pot for 2LT0341 in accordance with weld record WR2-04-096 and RRP 040302218-04. A VT-3 examination on the completed installation of condensate pot pipe straps was performed with satisfactory results.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature]

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 5/27/04

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 HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/25/04 to 5/27/04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

N & I

California

1574

National Board, State, Province, and Endorsements

Date May 28, 2004

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