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A. Edward Scherer  
Manager of  
Nuclear Regulatory Affairs

July 21, 2006

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 April 7, 2004 through April 23, 2006, the date Unit 2 returned to service following its Cycle 14 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

P.O. Box 128  
San Clemente, CA 92672  
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A047

Document Control Desk  
San Onofre Nuclear Generating Station  
Unit 2

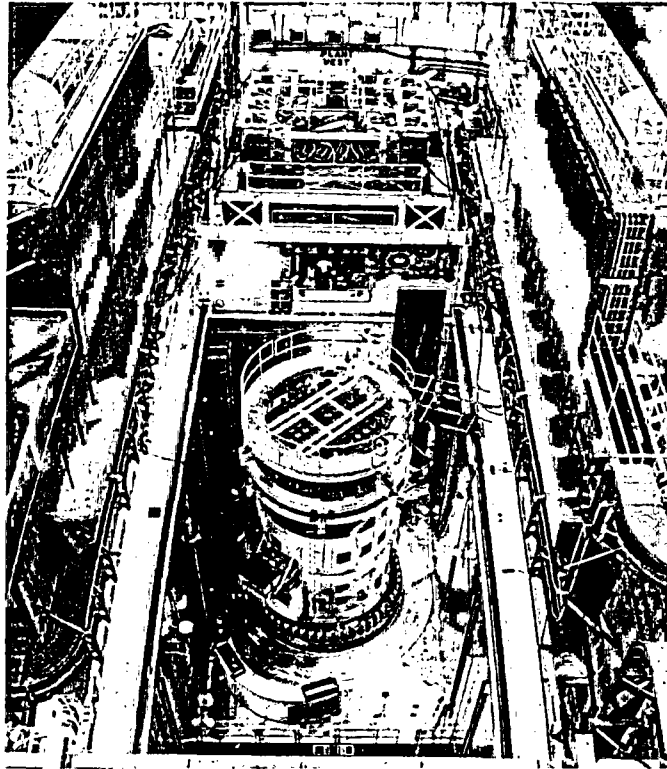
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July 21, 2006  
Owner's Report of ISI

cc: B.S. Mallett, Regional Administrator, NRC Region IV  
D. D. Chamberlain, Director, Division of Reactor Safety, NRC Region IV  
N. Kalyanam, 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  
2000 McFadden Avenue, Suite 215  
Santa Ana, CA 92705

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-14**

**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 April 7, 2004 to April 23 2006.

<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 14 outage.

## **2 SUMMARY REPORT**

**Date of Document Completion.....**July 21, 2006

**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: April 7, 2004 to April 23, 2006  
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: 7/21/06 Signed: Southern California Edison By: Tom R. Yackle  
(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 April 7, 2004 to April 23, 2006 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 J. Gaston Commissions CA 1574 N & I  
Inspector's Signature NB, State, Province or Endorsements

Date: 7/21/06

### **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 April 7, 2004 to April 23, 2006 are included in Attachment-2.

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

Results of the inservice examinations/tests performed in accordance with ASME Section XI ISI program were acceptable except as noted below,

1) Ultrasonic examination (UT) of Pressurizer safety nozzle to safe end dissimilar metal weld ISI designation number 02-005-027 identified five axial flaw indications, and Pressurizer safety nozzle to safe end dissimilar metal weld ISI designation number 02-005-028 identified one axial flaw indication. Indications were confirmed not surface connecting by supplemental eddy current examination (ECT) and visual examination.

Action Requests 060100998 for the weld 02-005-027, and 060101057 for the weld 02-005-028 were generated to implement corrective measures. Structural weld overlay repair (WOL) was performed on both welds to mitigate potential primary water stress corrosion cracking (PWSCC). WOL was also performed on Pressurizer safety nozzle to safe end dissimilar metal weld ISI designation number 02-005-029, Pressurizer spray nozzle to safe end dissimilar metal weld ISI designation number 02-005-030. It should be noted that UT examination of welds 02-005-029 and 02-005-030 did not identify any flaw indications, however, WOL repair was performed on welds 02-005-029 and 02-005-030 to mitigate any future potential PWSCC. After the WOL repair UT examination was performed on all the four WOL with acceptable results. WOL repair was performed in accordance with relief request ISI-3-18 and future ISI examinations will be performed per relief request ISI-3-18.

2) Visual VT-3 examination of piping support ISI designation number 02-020-088 identified non pressure boundary cracks at the support plate weld and confirmed by supplemental Magnetic Particle (MT) examination. Action request 060100961 was generated to implement corrective measure. Repair activity was performed to restore pipe support to original design specification. After the repair Visual VT-3, of the support, MT examination of support plate and weld, and UT examination of support plate thickness was performed with acceptable results.

### **3 STEAM GENERATOR EXAMINATIONS**

Examination report has been sent to the USNRC dated February 7, 2006,  
Subject: Docket No. 50-361, Special Report: Inservice Inspection of Steam  
Generator Tubes, Cycle 14 San Onofre Nuclear Generating Station, Unit-2.

**4 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 U2C14	Percentage of examinations completed for 1st the Period(U2C13 & U2C14) of the 3rd Interval, See Note-3
IWB	B-A	27	3	2	22	0	11%
	B-B	8	3	2	3	3	37%
	B-D	34	12	10	12	12	35%
	B-F/B-J	93	30	35	30	30	32%
	B-G-1	248	86	54	108	74	35%
	B-G-2	194	74	60	60	74	38%
	B-K	12	5	3	4	5	42%
	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	3	37%
	B-M-2	See Note-4	N/A	N/A	N/A	N/A	N/A
	B-N-1	3	1	1	1	1	33%
	B-N-2	30	0	0	30	0	0%
	B-N-3	2	0	0	2	0	0%
	B-O	1	0	0	1	0	0%
	B-P	Each reactor refueling outage prior to plant startup				100%	100%
	B-Q	Governed by the plant Technical Specification					
IWC	C-A	20	7	6	7	0	35%
	C-B	8	2	2	4	2	25%
	C-C	49	16	15	18	0	33%
	C-F-1	140	53	47	47	0	38%
	C-F-2	29	9	10	10	0	31%
	C-G	5	1	2	2	0	20%
	C-H	Each inspection period					100%
IWD	D-A	61	24	20	20	0	39%
	D-B	Each inspection period					100%
IWF	F-A	289	115	96	96	22	40%
IWE	E-A	Containment Surfaces	General Visual	General Visual	Visual VT-3	0	66%, See note-5
	E-C	9	3	3	3	0	66%, See note-5
	E-D	3	1	1	1	0	66%, See note-5
	E-G	101	0	0	101	0	0%, See note-5
IWL	L-A	Once in every ten years					100%, See note-5
	L-B	Once in every five years					100%, 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	0	32%
Notes : 1) Required Examinations subject to change based on							
a) Plant Modification							
b) Periodic update of Regulatory Guide 1.147, Inservice Inspection Code Case Acceptability							

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

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 in accordance with 10CFR 50.55a					
e) Industry events which may impact RI-ISI program					
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)					

**5 ATTACHMENT- 2**

**LIST OF ISI EXAMINATIONS AND  
TESTS COMPLETED (8 Pages)**

LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14

ISI DESIGNATION NUMBER	COMPONENT EXAMINED OR TESTED	CODE CLASS	CODE CATEGORY	CODE ITEM NUMBER	EXAMINATION OR TEST METHOD		
					VOLUMETRIC EXAM	SURFACE EXAM	VISUAL EXAM
02-001-057-01	REACTOR VESSEL CLOSURE NUT #1	1	BG1	B6.10			VT-1
02-001-057-02	REACTOR VESSEL CLOSURE NUT #2	1	BG1	B6.10			VT-1
02-001-057-03	REACTOR VESSEL CLOSURE NUT #3	1	BG1	B6.10			VT-1
02-001-057-04	REACTOR VESSEL CLOSURE NUT #4	1	BG1	B6.10			VT-1
02-001-057-05	REACTOR VESSEL CLOSURE NUT #5	1	BG1	B6.10			VT-1
02-001-057-06	REACTOR VESSEL CLOSURE NUT #6	1	BG1	B6.10			VT-1
02-001-057-07	REACTOR VESSEL CLOSURE NUT #7	1	BG1	B6.10			VT-1
02-001-057-08	REACTOR VESSEL CLOSURE NUT #8	1	BG1	B6.10			VT-1
02-001-057-09	REACTOR VESSEL CLOSURE NUT #9	1	BG1	B6.10			VT-1
02-001-057-10	REACTOR VESSEL CLOSURE NUT #10	1	BG1	B6.10			VT-1
02-001-057-11	REACTOR VESSEL CLOSURE NUT #11	1	BG1	B6.10			VT-1
02-001-057-12	REACTOR VESSEL CLOSURE NUT #12	1	BG1	B6.10			VT-1
02-001-057-13	REACTOR VESSEL CLOSURE NUT #13	1	BG1	B6.10			VT-1
02-001-057-14	REACTOR VESSEL CLOSURE NUT #14	1	BG1	B6.10			VT-1
02-001-057-15	REACTOR VESSEL CLOSURE NUT #15	1	BG1	B6.10			VT-1
02-001-057-16	REACTOR VESSEL CLOSURE NUT #16	1	BG1	B6.10			VT-1
02-001-057-17	REACTOR VESSEL CLOSURE NUT #17	1	BG1	B6.10			VT-1
02-001-057-18	REACTOR VESSEL CLOSURE NUT #18	1	BG1	B6.10			VT-1
02-001-057-19	REACTOR VESSEL CLOSURE NUT #19	1	BG1	B6.10			VT-1
02-001-057-20	REACTOR VESSEL CLOSURE NUT #20	1	BG1	B6.10			VT-1
02-001-057-21	REACTOR VESSEL CLOSURE NUT #21	1	BG1	B6.10			VT-1
02-001-057-22	REACTOR VESSEL CLOSURE NUT #22	1	BG1	B6.10			VT-1
02-001-057-23	REACTOR VESSEL CLOSURE NUT #23	1	BG1	B6.10			VT-1
02-001-057-24	REACTOR VESSEL CLOSURE NUT #24	1	BG1	B6.10			VT-1
02-001-057-25	REACTOR VESSEL CLOSURE NUT #25	1	BG1	B6.10			VT-1
02-001-057-26	REACTOR VESSEL CLOSURE NUT #26	1	BG1	B6.10			VT-1
02-001-057-27	REACTOR VESSEL CLOSURE NUT #27	1	BG1	B6.10			VT-1
02-001-057-28	REACTOR VESSEL CLOSURE NUT #28	1	BG1	B6.10			VT-1
02-001-057-29	REACTOR VESSEL CLOSURE NUT #29	1	BG1	B6.10			VT-1
02-001-057-30	REACTOR VESSEL CLOSURE NUT #30	1	BG1	B6.10			VT-1
02-001-057-31	REACTOR VESSEL CLOSURE NUT #31	1	BG1	B6.10			VT-1
02-001-057-32	REACTOR VESSEL CLOSURE NUT #32	1	BG1	B6.10			VT-1

**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14**

02-001-057-33	REACTOR VESSEL CLOSURE NUT #33	1	BG1	B6.10			VT-1
02-001-057-34	REACTOR VESSEL CLOSURE NUT #34	1	BG1	B6.10			VT-1
02-001-057-35	REACTOR VESSEL CLOSURE NUT #35	1	BG1	B6.10			VT-1
02-001-057-36	REACTOR VESSEL CLOSURE NUT #36	1	BG1	B6.10			VT-1
02-001-057-37	REACTOR VESSEL CLOSURE NUT #37	1	BG1	B6.10			VT-1
02-001-057-38	REACTOR VESSEL CLOSURE NUT #38	1	BG1	B6.10			VT-1
02-001-057-39	REACTOR VESSEL CLOSURE NUT #39	1	BG1	B6.10			VT-1
02-001-057-40	REACTOR VESSEL CLOSURE NUT #40	1	BG1	B6.10			VT-1
02-001-057-41	REACTOR VESSEL CLOSURE NUT #41	1	BG1	B6.10			VT-1
02-001-057-42	REACTOR VESSEL CLOSURE NUT #42	1	BG1	B6.10			VT-1
02-001-057-43	REACTOR VESSEL CLOSURE NUT #43	1	BG1	B6.10			VT-1
02-001-057-44	REACTOR VESSEL CLOSURE NUT #44	1	BG1	B6.10			VT-1
02-001-057-45	REACTOR VESSEL CLOSURE NUT #45	1	BG1	B6.10			VT-1
02-001-057-46	REACTOR VESSEL CLOSURE NUT #46	1	BG1	B6.10			VT-1
02-001-057-47	REACTOR VESSEL CLOSURE NUT #47	1	BG1	B6.10			VT-1
02-001-057-48	REACTOR VESSEL CLOSURE NUT #48	1	BG1	B6.10			VT-1
02-001-057-49	REACTOR VESSEL CLOSURE NUT #49	1	BG1	B6.10			VT-1
02-001-057-50	REACTOR VESSEL CLOSURE NUT #50	1	BG1	B6.10			VT-1
02-001-057-51	REACTOR VESSEL CLOSURE NUT #51	1	BG1	B6.10			VT-1
02-001-057-52	REACTOR VESSEL CLOSURE NUT #52	1	BG1	B6.10			VT-1
02-001-057-53	REACTOR VESSEL CLOSURE NUT #53	1	BG1	B6.10			VT-1
02-001-057-54	REACTOR VESSEL CLOSURE NUT #54	1	BG1	B6.10			VT-1
02-001-080	AREAS ABOVE AND BELOW REACTOR CORE	1	BN1	B13.10			VT-3
02-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	1	B-B	B2.40	UT		
02-003-010	INLET NOZZLE-TO-HEAD WELD	1	B-D	B3.130	UT		
02-003-011	OUTLET NOZZLE-TO-HEAD WELD @ 45 DEGREES	1	B-D	B3.130	UT		
02-003-027-01	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-02	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-03	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-04	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-05	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-06	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-07	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-08	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-09	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-10	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-11	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1

**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14**

02-003-027-12	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-13	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-14	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-15	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-16	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-17	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-18	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-19	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-027-20	PRIMARY MANWAY STUD @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-01	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-02	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-03	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-04	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-05	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-06	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-07	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-08	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-09	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-10	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-11	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-12	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-13	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-14	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-15	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-16	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-17	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-18	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-19	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-003-028-20	PRIMARY MANWAY NUT @ 0 DEGREES	1	BG2	B7.30			VT-1
02-005-001	SUPPORT SKIRT-TO-BOTTOM HEAD WELD	1	B-K	B10.10	UT		
02-005-002	BOTTOM HEAD-TO-LOWER SHELL GIRTH WELD	1	B-B	B2.11	UT		
02-005-003	LOWER SHELL LONGITUDINAL WELD @ 90 DEGREES	1	B-B	B2.12	UT		
02-005-009	SURGE NOZZLE-TO-BOTTOM HEAD WELD	1	B-D	B3.110	UT		
02-005-010	SPRAY NOZZLE-TO-TOP HEAD WELD	1	B-D	B3.110	UT		
02-005-011	SAFETY NOZZLE-TO-TOP HEAD WELD @ 45 DEGREES	1	B-D	B3.110	UT		

**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14**

02-005-012	SAFETY NOZZLE-TO-TOP HEAD WELD @ 225 DEGREES	1	B-D	B3.110	UT		
02-005-013	SAFETY NOZZLE-TO-TOP HEAD WELD @ 315 DEGREES	1	B-D	B3.110	UT		
02-005-014	SURGE NOZZLE INNER RADIUS	1	B-D	B3.120	UT		
02-005-015	SPRAY NOZZLE INNER RADIUS	1	B-D	B3.120	UT		
02-005-016	SAFETY NOZZLE INNER RADIUS @ 45 DEGREES	1	B-D	B3.120	UT		
02-005-017	SAFETY NOZZLE INNER RADIUS @ 225 DEGREES	1	B-D	B3.120	UT		
02-005-018	SAFETY NOZZLE INNER RADIUS @ 315 DEGREES	1	B-D	B3.120	UT		
02-005-019-01	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-02	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-03	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-04	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-05	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-06	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-07	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-08	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-09	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-10	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-11	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-12	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-13	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-14	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-15	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-019-16	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
02-005-027	SAFETY NOZZLE-TO-SAFE END WELD @ 45 DEGREES	1	B-F	B5.40	UT		
02-005-028	SAFETY NOZZLE-TO-SAFE END WELD @ 225 DEGREES	1	B-F	B5.40	UT		
02-005-029	SAFETY NOZZLE-TO-SAFE END WELD @ 315 DEGREES	1	B-F	B5.40	UT		
02-005-030	SPRAY NOZZLE-TO-SAFE END WELD	1	B-F	B5.40	UT		
02-005-031	SURGE NOZZLE-TO-SAFE END WELD	1	B-F	B5.40	UT		
02-005-034	SAFE END-TO-PIPE FLANGE FOR SAFETY NOZZLE @ 45 DEGREES	1	B-J	B9.11	UT		
02-006-009	DRAIN NOZZLE-TO-PIPE WELD	1	B-J	B9.32	UT		

LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14

02-008-018	DRAIN NOZZLE-TO-PIPE WELD (AREA 2C9, 24' ELEV.)	1	B-J	B9.32	UT		
02-012-018	DRAIN NOZZLE-TO-PIPE WELD	1	B-J	B9.32	UT		
02-016-001	12" SCH 160 NOZZLE-TO PIPE	1	B-J	B9.11	UT		
02-016-015	12" SCH 160 ELBOW-TO-PIPE	1	B-J	B9.11	UT		
02-017-068	GUIDE W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
02-017-021	12" SCH 160 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
02-017-077	Y-STOP	1	F-A	F1.10A			VT-3
02-018-082	VARIABLE SPRING (FORMERLY 02-018-083)	1	F-A	F1.10C			VT-3
02-018-003	SIDE PLATE BOLTING (2 PLACES) (DRAWING NO. SO23-408-1-6-46)	1	BG2	B7.70			VT-1
02-018-018	12" SCH 160 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
02-018-028	12" SCH 160 ELBOW-TO-PIPE	1	B-J	B9.11	UT		
02-019-010	VALVE BODY LOWER SECTION WELD (DRAWING NO. SO23-507-5-1-22)	1	BM1	B12.40		PT	
02-019-110	GUIDE W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
02-019-110	GUIDE	1	F-A	F1.10A			VT-3
02-019-111	AXIAL STOP	1	F-A	F1.10A			VT-3
02-020-087	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
02-020-041	12" SCH 160 PIPE-TO-SAFE END	1	B-J	B9.11	UT		
02-020-083	Y-STOP	1	F-A	F1.10A			VT-3
02-020-084	GUIDE & Y-STOP	1	F-A	F1.10B			VT-3
02-020-085	STRUT (FORMERLY 02-020-086)	1	F-A	F1.10A			VT-3
02-020-087	GUIDE & Y-STOP	1	F-A	F1.10B			VT-3
02-020-088	Y-STOP	1	F-A	F1.10A			VT-3
02-020-090	STRUT (FORMERLY 02-020-091)	1	F-A	F1.10A			VT-3
02-020-092	Y-STOP	1	F-A	F1.10A			VT-3
02-020-095	STRUT	1	F-A	F1.10A			VT-3
02-020-100	GUIDE & Y-STOP (FORMERLY 02-020-101)	1	F-A	F1.10B			VT-3
02-021-016	18" SCH 160 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
02-021-071	SWAY STRUT (FORMERLY 02-021-072)(SNUBBER REPLACED DCP 2-6683.2BP)	1	F-A	F1.10A			VT-3
02-022-016	LOWER BONNET LOWER WELD (DRAWING NO. SO23-950-148-3)	1	BM1	B12.40		PT	
02-022-017	LOWER BONNET UPPER WELD (DRAWING NO. SO23-950-148-3)	1	BM1	B12.40		PT	



LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14

02-022-024	SWAY STRUT (SNUBBER REPLACED DCP 2-6683.2BP)	1	F-A	F1.10A			VT-3
02-023-028	AXIAL STOP & Y-STOP W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
02-023-028	AXIAL STOP & Y-STOP	1	F-A	F1.10B			VT-3
02-023-160	REDUCER TO 4" SCH 120 PIPE	1	B-J	B9.11	UT		
02-023-270	4" SCH 120 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
02-024-051	SWAY STRUT	1	F-A	F1.10A			VT-3
02-024-054	4" SCH 120 TEE-TO-PIPE (FORMERLY 02-024-050)	1	B-J	B9.11	UT		
02-024-060	4" SCH 120 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
02-024-180	4" SCH 120 PIPE-TO-PIPE	1	B-J	B9.11	UT		
02-024-190	4" SCH 120 PIPE-TO-NOZZLE	1	B-J	B9.11	UT		
02-025-001	6" SCH 160 NOZZLE-TO-ELBOW	1	B-J	B9.11	UT		
02-025-014	2" STUD BOLTS (INLET FLANGE)	1	BG2	B7.70			VT-1
02-025-018	6" SCH 160 NOZZLE-TO-ELBOW	1	B-J	B9.11	UT		
02-026-034	VERTICAL SUPPORT & GUIDES	1	F-A	F1.10B			VT-3
02-026-210	2" SCH 160 TEE-TO-PIPE (ADDED BY DCN #1 TO S21201ML060 REV 11)	1	B-J	B9.21	UT		
02-026-250	2" SCH 160 ELBOW-TO-PIPE (ADDED BY DCN #1 TO S21201ML060 REV 11)	1	B-J	B9.21	UT		
02-030-006	REDUCER-TO-3" SCH 160 PIPE	1	B-J	B9.21	UT		
02-030-017	VARIABLE SPRING	1	F-A	F1.10C			VT-3
02-032-001	2" SCH 160 NOZZLE-TO-PIPE	1	B-J	B9.21	UT		
02-032-024	VERTICAL SUPPORT	1	F-A	F1.10A			VT-3
02-032-033	VARIABLE SPRING	1	F-A	F1.10C			VT-3
02-034-006	2" SCH 160 PIPE-TO-VALVE	1	B-J	B9.21	UT		
02-036-021	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-022	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-023	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-024	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-025	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-026	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-027	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-028	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-029	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-030	REACTOR COOLANT PUMP STUD	1	BG1	B6.180	UT		
02-036-037	REACTOR COOLANT PUMP NUT	1	BG1	B6.200			VT-1

**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14**

02-036-038	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-039	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-040	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-041	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-042	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-043	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-044	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-045	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-046	REACTOR COOLANT PUMP NUT	1	BG1	B6.200		VT-1
02-036-080	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-081	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-082	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-083	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-084	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-085	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-086	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-087	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-088	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-089	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-090	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-091	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-092	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1
02-036-093	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60		VT-1

**LIST OF ISI EXAMINATIONS AND TESTS COMPLETED DURING U2C14**

02-036-094	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
02-036-095	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
02-039-010	3" SCH 160 PIPE-TO-ELBOW	1	B-J	B9.21	UT		
02-039-070	GUIDE	1	F-A	F1.10B			VT-3
02-075-039	REINFORCING RING-TO-NOZZLE WELD	2	C-B	C2.31		PT	
02-075-040	REINFORCING RING-TO-SHELL WELD	2	C-B	C2.31		PT	
SYSTEM LEAKAGE TEST COMPLETED							
PROCEDURE	SYSTEM	CLASS	CATEGORY	TEST			
SO23-XVII-3.1.1	REACTOR COOLANT	1	B-P	VT-2			
SO23-XVII-3.2.3	MAIN AND AUXILIARY FEEDWATER	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-504-2 5) N-522 6) N-598 7) N-638-1							

**6 ATTACHMENT- 3**

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

MO	EQID	Class	NIS-2	Worksum
1 03050053000	S21201MU976	III-1	07/07/06	Replaced disc
2 03061838000	2PV0201B	III-2	09/26/05	Replaced valve spindle (plug)
3 03080640001	S21204MU019	III-1	*	Replaced check valve
4 03120409000	S21208MU001	III-2	07/06/06	Replaced disc
5 03120413000	S21208MU020	III-2	06/25/06	Replaced disc
6 03121523000	S21204MR398	III-2	08/22/05	Replaced flange bolting
7 04010830001	S21208ML059	III-2	02/17/06	Replaced blind flange bolting
8 04032477000	2HV9350	III-1	07/12/06	Replaced gate and segment
9 04041167000	2PSV9206	III-2	07/12/06	Replaced relief valve
10 04050054000	S21208MU054	III-2	07/16/04	Replaced valve disk
11 04060074000	S21208MU070	III-2	07/06/06	Replaced valve disc and bonnet
12 04060560001	S21201ME087	III-1	07/06/06	Replaced manway cover bolting
13 04060577001	S21301ME089P	III-1	07/07/06	Replaced SG manway bolting
14 04071329000	S21201ML007	III-1	07/06/06	Replaced thermowells
15 04071330000	S21201ML008	III-1	07/06/06	Replaced thermowells
16 04071331000	S21201ML009	III-1	07/06/06	Replaced thermowells
17 04071332001	S21201ML010	III-1	07/06/06	Replaced thermowells
18 04090617000	027-17643-ASSY #2	III-1	02/16/06	Fabricated SG instrument half-nozzle
19 04090683000	027-17643-ASSY #2	III-1	02/16/06	Fabricated SG instrument half-nozzle
20 04120965000	S21301ME088	III-2	*	Replaced SG handhole cover bolting
21 04121088000	2PSV0200	III-1	06/25/06	Replaced valve and inlet bolting
22 04121113000	2PSV8401	III-2	07/07/06	Replaced safety valve and inlet bolting
23 04121172000	2PSV0201	III-1	06/25/06	Replaced valve and inlet bolting
24 04121178000	2PSV8402	III-2	07/07/06	Replaced safety valve and inlet bolting
25 04121223000	2PSV8404	III-2	07/07/06	Replaced safety valve and inlet bolting
26 04121242000	2PSV8406	III-2	07/07/06	Replaced safety valve and inlet bolting
27 04121251000	2PSV8407	III-2	07/07/06	Replaced safety valve and inlet bolting
28 04121257001	S21305MU129	III-2	*	Replaced retaining ring
29 04121321000	2PSV8416	III-2	07/07/06	Replaced safety valve and inlet bolting
30 05010435000	S21208MU017	III-2	07/05/06	Replaced check valve
31 05011095000	S21901MU573	III-2	06/25/06	Inspected valve
32 05011285000	SA2301MU061	III-2	06/25/06	Replaced disc
33 05020382000	S21201ME087	III-1	06/26/06	Replaced pressurizer heater sleeves
34 05020603000	S21301ME089P	III-1	07/05/06	Removed MNSA clamps on primary instrument nozzles

MO	EQID	Class	NIS-2	Worksum
35 05021560000	2PV0100A	III-1	08/22/05	Replaced upper bonnet bellows assembly
36 05021982000	S21208ME062	III-2	07/06/06	Replaced tube side channel head cover bolting
37 05030322000	2HV6223	III-2	07/06/06	Replaced flange bolting
38 05030326000	2HV6236	III-2	07/07/06	Replaced flange bolting
39 05030534000	S21201ME087	III-1	06/06/06	Removed MNSA clamps on lower level instr. Nozzles
40 05050798000	S21201MR039	III-1	07/05/06	Fabricated instrument nozzle/root valve assemblies
41 05051626000	027-17841	III-1	07/12/06	Machined partial length heater sleeves
42 05051870000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
43 05051871000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
44 05051872000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
45 05051875000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
46 05051876000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
47 05051877000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
48 05051878000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
49 05051880000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
50 05051881000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
51 05051882000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
52 05051883000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
53 05051884000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
54 05051885000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
55 05051886000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
56 05051887000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
57 05051888000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
58 05051889000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
59 05051890000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
60 05051891000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
61 05051892000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
62 05051893000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
63 05051894000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
64 05051896000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
65 05051898000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
66 05051899000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
67 05051901000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
68 05051903000	027-17841	III-1	07/12/06	Machined partial length heater sleeve

MO	EQID	Class	NIS-2	Worksum
69 05051904000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
70 05051905000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
71 05051906000	027-17841	III-1	07/12/06	Machined partial length heater sleeve
72 05061579000	S21201ME087	III-1	07/06/06	Performed half nozzle repairs
73 05061934000	S21101MV001A	III-1	07/06/06	Replaced & modified instrument flange adapter hubs
74 05061975000	S21201MU129	III-1	07/06/06	Removed/reinstalled body-to-cover seal weld
75 05070080000	S21201MU977	III-1	07/06/06	Replaced disc and plug nuts
76 05070619000	S21208MU001	III-2	07/06/06	Removed and reinstalled body to bonnet seal weld
77 05070633000	S21208MU020	III-2	06/25/06	Removed/reinstalled seal weld
78 05071578000	S21201ME087	III-1	06/26/06	Inspected existing pressurizer heaters for reuse
79 05081473000	S21201ME087	III-1	02/17/06	Remachined instrument nozzle
80 05110433000	027-17643-ASSY-3	III-1	07/06/06	Fabricated SG instrument half-nozzle
81 05110529000	027-17643-ASSY-3	III-1	07/06/06	Fabricated SG instrument half-nozzle
82 05110935000	S21201ME087	III-1	02/17/06	Cut holes in Pressurizer skirt for ventilation
83 06010310000	S21201MP003	III-1	07/05/06	Replaced RCP seal cartridge
84 06010638001	S21204ML036	III-2	07/06/06	Replaced pipe spool and eliminated drain valve
85 06011050001	S21201ME087	III-1	07/12/06	Replaced flange bolting
86 06011209000	S2RC012H057	III-1	07/07/06	Replaced snubber load stud with load pin
87 06011272000	S21901MU573	III-2	06/25/06	Replaced check valve
88 06011277001	S21201MU976	III-1	07/07/06	Machined disc to correct disc to seat alignment
89 06011538000	S2ST002H002	III-2	07/12/06	Replaced snubber and load pin
90 06011790000	2-CS-047-033	III-2	07/05/06	Replaced flange bolting
91 06011842000	S2VC058H004	III-2	02/24/06	Replaced snubber
92 06011893000	S21201MU977	III-1	07/06/06	Machined disc to correct disc to seat alignment
93 06011946000	S21208MU216	III-2	07/12/06	Replaced valve with similar valve
94 06012110000	2HV9303	III-2	07/05/06	Welded set screw to retaining plate
95 06020298000	MYCAP	III-1	07/05/06	Fabricated pressurizer heater sleeve cap
96 06020365000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
97 06020366000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
98 06020367001	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
99 06020368000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
100 06020881000	S21104CEDM	III-1	07/05/06	Replaced vent stem in CEDM #56
101 06020903000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
102 06020934001	S21201MU129	III-1	07/06/06	Replaced disc

MO	EQID	Class	NIS-2	Worksum
103 06021043000	S21201MU129	III-1	07/06/06	Removed/reinstalled body-to-cover seal weld
104 06021161000	2HV9350	III-1	07/12/06	Restored packing leak-off sealweld
105 06021448001	S21201MR041	III-1	07/12/06	Refurbished valve & nozzle/standpipe assembly
106 06021452000	S21201ME087	III-1	07/05/06	Fabricated oversized PZR half nozzle
107 06030450000	S2ST001H021	III-2	07/06/06	Replaced snubber
108 06030624000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
109 06030720000	S21201ME087	III-1	07/13/06	Pressurizer weld overlay repair
110 06040160000	S21305MU124	III-2	07/12/06	Disassembled valve
111 06040517000	S21305MU124	III-2	07/12/06	Replaced valve
112 06040519000	S21305MU448	III-2	07/12/06	Replaced poppet
113 98041924003	S21201MU033	III-2	07/17/06	Replaced flange bolting

\* MO 03080640 001 installed a straight section of seamless replacement pipe to facilitate a valve replacement. The affected pipe is on the downstream side of the High Pressure Safety Injection System. The replacement pipe is certified as ASME III-2 instead of the required Class 1. Due to in-field obstructions, some portions of this piping were not accessible and SCE was not able to complete required Ultrasonic testing (UT) of those portions of the pipe. Action Request Assignment number 040401344-09 was generated to complete this required UT inspection at next refueling outage (Unit 2, Cycle 15). SCE confirmed that the affected pipe section remains operable.

\* MO 04120965 000 replaced one stud and one nut on the Steam Generator secondary side handhole cover. ASME Section XI requires a VT-2 leak check but this leak check was not performed. Action Request Assignment number 060700422-01 was generated to perform a VT-2 examination at next refueling outage (Unit 2, Cycle 15). SCE confirmed that the affected Steam Generator remains operable.

\* MO 04121257 001 replaced the retaining ring on Feedwater check valve. This check valve is normally open and prevents backflow into the Feedwater System when operating the Auxiliary Feedwater system. ASME Section XI requires a VT-2 leak check but this leak check was not performed. Action Request Assignment number 060700420-01 was generated to perform a VT-2 examination at next refueling outage (Unit 2, Cycle 15). SCE confirmed that the affected check valve remains operable.



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda

Date: 07/04/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0252,  
060100278-04  
MO/CWO: 03050053000 06011277001  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	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	Scrapped	1985	Removed	Yes
Disc	Flowserve	24187-3	N/A	RSO-1836-05	2005	Installed	Yes

## 7. Description of Work:

MO 03050053 replaced the disc in the valve in plant location S21201MU976 with an in-kind replacement disc in accordance with ASME XI Data flag-0252. MO 06011277001 machined the new disc to correct disc face to seat alignment in accordance with RRP 060100278-04. The machining was performed per Note 15 of drawing SO23-952-26. The minimum thicknesses for the disc specified on the drawing was maintained and verified after machining. The new surfaces created due to the machining were PT examined with satisfactory results (ref: 2PT-024-06).

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

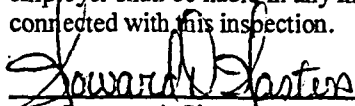
Supervising ASME Codes Engineer

Date: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/4/05 to 7/7/06, 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

1574 California N&I

National Board, State, Province, and Endorsements

Date 7/7/06

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\*  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603  
(name and address of NPT Certificate Holder)
2. Manufactured for Edison Material Supply, P. O. Box 700, Rosemead, CA 91770  
(name and address of purchaser)
3. Location of installation Edison Material Supply, San Onofre Nuclear Station, San Clemente, CA 92672  
(name and address)
4. Type W8421963, R/B SA182, F316L N/A N/A 2005  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 No I N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Disk for size 4 1515# SC Valve.

S. O. 33697

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) <u>24187-2</u>	<u>N/A</u>	(26)	
(2) <u>24187-3</u>	<u>N/A</u>	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2485 psi. Temp. 650 °F. Hydro. test pressure N/A at temp. °F  
(when applicable)

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 24187-2 through 24187-3

CERTIFICATION OF DESIGN

Design specifications certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_  
(when applicable)  
Design report\* certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_  
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)  
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006  
Date 8/25/05 Name Flowserve Corporation Signed J.A.P.  
(NPT Certificate Holder) (authorized representative)

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 NC and employed by HSB CT  
of Hartford, CT have inspected these items described in this Data Report on 8-25-05, and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage  
or loss of any kind arising from or connected with this inspection.

Date 8-25-05 Signed [Signature] Commissions NC\*1421  
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 09/22/05

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: ASME SECTION XI  
DATA-0599

MO/CWO: 03061838000

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

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 (Valve); ASME Section II and III-2, 1989 Edition, No Addenda (Spindle).

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 699# Globe (Drag Valve)	Control Components	36995-1-2	N/A	2PV0201B	1984	---	Yes
Spindle	Control Components	635339, Ht. #289D	N/A	RSO-2551-03, SB637 NO7718 (Inconel)	2000	Installed	Yes

## 7. Description of Work:

Replaced the valve spindle in the valve located in plant position 2PV0201B with a new replacement spindle in accordance with RRP ASME Section XI Data - 0599.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 041101141-01

Pressure: ≥ 305 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 9/22/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/11/04 to 1/21/05, 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

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

Date

September 26, 2005

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/22/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0244,  
031200265-03

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 03120409000 05070619000

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 (NC), 1971 Edition, Summer 1973 Addenda

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Stainless Packed Y-Globe Valve	Kerotest	AFE5-20	N/A	S21208MU001	1984	Corrected	Yes
Disc	Kerotest	NA024ABY-2	N/A	RSO-0270-84	1984	Installed	Yes

## 7. Description of Work:

Replaced the disc in the valve in plant location S21208MU001 with an in-kind replacement disc in accordance with ASME XI Data flag-0244. MO 05070619 removed and reinstalled the body to bonnet seal weld in accordance with RRP 031200265-03 and weld record WR2-05-230.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 031200265-04

Pressure: ≥ 312 psi Test Temp: N/A °F

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 disc was certified to a higher code class ASME III-1 as allowed by ASME III paragraph NCA-2134.

(Applicable Manufacturer's Data Reports to be attached)

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/5/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/1/05 to 7/6/06, 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 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date 7/6/06



## FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\*

As required by the Provisions of the ASME Code Rules

Sht. 1 of 2

1. (a) Manufactured by Kerotest Manufacturing Corp., Pittsburgh, PA (NU-92099)  
(Name and address of Manufacturer of part)
- (b) Manufactured for Southern California Edison Company, San Clemente, CA  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part NAO24-ABY-1 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No. 22516-99R-(1)Z Drawing Prepared by Kerotest Mfg. Corp.
- (b) Description of Part Inspected 1-1/2" Stem/Disc Assembly  
Sum.
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date 1973, Case No. N/A Class 1
3. Remarks: Spare Parts for Nuclear Valves  
(Brief description of service for which component was designed)
- 2 Sheets - (N-2 and Supplement)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.  
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date February 24, 1984 Signed Kerotest Mfg. Corp. By [Signature]  
(Manufacturer)

Certificate of Authorization Expires 4/25/86 Certificate of Authorization No. 1903

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at \_\_\_\_\_

Stress analysis report on file at \_\_\_\_\_

Design specifications certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

Stress analysis report certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Pennsylvania and employed by The Hartford Steam Boiler I&I Co. of Hartford, Connecticut

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 2/27/84 19\_\_\_\_, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date 2/27/84 19\_\_\_\_

[Signature]  
Inspector's Signature

Commissions PA2187

National Board, State, Province and No.

\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in Items 1-2 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3, "Remarks".

RSO-0270-84

## SUPPLEMENT SHEET FORM N-2

NU-92099

1. (A) MANUFACTURED BY: Kerotest Manufacturing Corp.  
(B) MANUFACTURED FOR: Southern California Edison Company

## 2. IDENTIFICATION -

- (A) DRAWING NO.: 22516-99R-(1)Z DRAWING PREPARED BY: Kerotest Mfg. Corp.  
(B) DESCRIPTION - SIZE 1-1/2", Stem/Disc Assembly  
(C) ASME CODE SECTION III  
EDITION 1971, ADDENDA DATE Sum. 1973, CASE NO. N/A, CLASS 1

SERIAL NUMBER

SERIAL NUMBER

2.	NA024-ABY-2	14.	
3.		15.	
4.		16.	
5.		17.	
6.		18.	
7.		19.	
8.		20.	
9.		21.	
10.		22.	
11.		23.	
12.		24.	
13.		25.	

3. REMARKS: Spare Parts for Nuclear Valves  
2 Sheets (N-2 and Supplement)

SIGNED: Kerotest Manufacturing Corp. BY: [Signature] DATE: 2/24/84  
Authorized Nuclear Inspector BY: \_\_\_\_\_ DATE: \_\_\_\_\_

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/14/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0244,  
031200267-3

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 03120413000 05070633000

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, 1971 Edition, Summer 1973 Addenda and Design Specification SO23-408-01.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Stainless Packed Y-Type Globe Valve	Kerotest	AFE5-18	N/A	S21208MU020	1984	Corrected	Yes
Disc	BW/IP International	JSY11/ARZ-4	N/A	RSO-0518-98, SA479 316	1993	Installed	Yes

## 7. Description of Work:

The Y-Globe valve currently installed in plant position S21208MU020 was reworked. To access the valve internals, the body-to-bonnet seal weld was required to be removed and reinstalled upon completion of valve rework. MO 03120413 replaced the valve disc with an in-kind replacement disc in accordance with ASME XI Data Flag-0244. MO 05070633 removed the seal weld to allow for replacement of the disc, and then reinstalled the seal weld in accordance with RRP 031200267-03 and weld record WR2-05-226.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 031200267-04

Pressure: ≥ 312 psi Test Temp: N/A °F

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 disc was certified to a higher code class ASME III-1 as allowed by ASME III paragraph NCA-2134.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/22/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/7/05 to 6/25/06, 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 1574 California N & I  
Inspector's Signature National Board, State, Province, and Endorsements

Date 6/25/06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***

As Required by the Provisions of the ASME Code, Section III  
Not To Exceed One Day's Production

RSO-0518-98

Pg. 1 of 2

1. Manufactured and certified by Kerotest Mfg. Corp., 2525 Liberty Ave., Pgh, Pa 15222 (C200387)  
(Name and address of NPT Certificate Holder)
2. Manufactured for BW/IP International, Inc. Pump Div. Los Angeles Operations 2300 E. Vernon Ave  
(Name and address of purchaser)
3. Location of installation BW/IP International Inc. Pump Div. Los Angeles Operations 2300 E. Vernon Ave.  
(Name and address)
4. Type 22516-99R Rev. C SA479, 316 / 75,000 PSI N/A 1993  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRH) (year built)
5. ASME Code, Section III: 1989\* No 1 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: BW/IP Job No. T000884100, Part Name - Stem Disc Assembly

Hydrostatic Testing Not Performed. Nameplate attached by wire. Pressure Rating: 1708

\*Meets requirements of ASME Code 1971 thru 1986 Edition including all Addendums.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) JSY7/ARZ-2	N/A
(2) JSY11/ARZ-1	N/A
(3) JSY11/ARZ-2	N/A
(4) JSY11/ARZ-3	N/A
(5) JSY11/ARZ-4	N/A
(6) JSY11/ARZ-5	N/A
(7) JSY11/ARZ-6	N/A
(8) JSY11/ARZ-7	N/A
(9) JSY11/ARZ-8	N/A
(10) JSY11/ARZ-9	N/A
(11) JSY11/ARZ-10	N/A
(12) JSY11/ARZ-11	N/A
(13) JSY11/ARZ-12	N/A
(14) JSY11/ARZ-13	N/A
(15) JSY11/ARZ-14	N/A
(16) JSY11/ARZ-15	N/A
(17) JSY11/ARZ-16	N/A
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 4099 psi. Temp. 100 °F. Hydro. test pressure N/A at temp. °F  
(when applicable)

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

(12/86)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Mr. Serial No. see below

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. no. N/A  
(when applicable)

Design report\* certified by N/A P.E. State N/A Reg. no. N/A  
(when applicable)

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that ~~this~~ (these) STEM DISC ASSEMBLY  
 conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. 1903 Expires 4-25-95

Date 11/22/93 Name Kerotest Manufacturing Corp. Signed Julian Berarducci  
(NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF SHOP 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 Pennsylvania and employed by Hartford Steam Boiler I&I Co.

of Hartford, CT have inspected these items described in this Data Report on 11-23-93 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the data shown above.

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

Date 11-23-93 Signed Dean J. Wink Commissions PA 2384 N  
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) state or prov. and no.)

Part or Appurtenance  
Serial Number

- (1) JSY7/ARZ-2
- (2) JSY11/ARZ-1
- (3) JSY11/ARZ-2 ✓
- (4) JSY11/ARZ-3
- (5) JSY11/ARZ-4 ✓
- (6) JSY11/ARZ-5
- (7) JSY11/ARZ-6
- (8) JSY11/ARZ-7 ✓
- (9) JSY11/ARZ-8
- (10) JSY11/ARZ-9
- (11) JSY11/ARZ-10 ✓
- (12) JSY11/ARZ-11
- (13) JSY11/ARZ-12
- (14) JSY11/ARZ-13
- (15) JSY11/ARZ-14
- (16) JSY11/ARZ-15
- (17) JSY11/ARZ-16

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda

Date: 08/03/05

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0480, GEN-239

MO/CWO: 03121523000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" NPS, 300# Flanged Piping Connection	Bechtel	Ht. #93570 & A1257 (ref trav. SO2-112-84)	N/A	S21204ML051; Spool Piece 2-SI-051-2C	1985	Corrected	Yes
5/8"-11 X 5" Studs (7 ea.)	Mackson, Inc	Ht. #622817	N/A	RSO-1630-04	N/A	Installed	No
5/8"-11 X 5" Studs (1 ea.)	Mackson, Inc	Ht. #614117	N/A	RSO-0298-03	N/A	Installed	No
5/8"-11 Nuts (11 ea.)	Mackson, Inc	Ht. #7307732	N/A	RSO-1630-04	N/A	Installed	No
5/8"-11 Nuts (5 ea.)	Vitco Nuclear Products	Ht. #5483089, Tr. Code 107	N/A	RSO-0819-95	N/A	Installed	No

## 7. Description of Work:

Flange studs and nuts were replaced on the piping flanged connection upstream (in pump pit) of LPSI pump S21204MP016 miniflow drain valve S21204MR398. The flange studs were cut from all-thread material in accordance with repair/replacement plan GEN-239.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐



See: AR 031201142-03

Pressure: ≥ 600 psi

Test Temp: N/A °F

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, 1989 Ed., No Add.;  
RoR-003-03 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add. (11  
nuts), and ASME III-2, 1974 Ed., No Add. (5 nuts).

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 8/19/05

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/29/04 to 8/22/05, 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

1574

California

N&I

National Board, State, Province, and Endorsements

Date 7/5/06

Originally signed by C.D. Thompson on 8/22/05  $\Delta$  Added A/R #



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda and Design Specification DS-1208.

Date: 02/13/06  
Unit: 2  
Repair/Replacement Plan: 031200045-06  
MO/CWO: 04010830001  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
1-1/2" 2500# Blind Flange	Ideal Forging	N/A	N/A	S21208ML059	N/A	Corrected	No
1-1/8" x 36" All-Thread Stud	Nova Machine Products	Ht. #8867312, Ht. Code K2Q	N/A	RSO-1710-93, SA193 B7	N/A	Installed	No
1-1/8"-7 Heavy Hex Nut (8)	Mackson, Inc	Ht. #34965, Trace #S325	N/A	RSO-2390-03, SA194 Gr. 7 (SEE-92-0065)	N/A	Installed	No

## 7. Description of Work:

Replaced the flange bolting (4 studs and 8 nuts) on the 1-1/2", 2500# Blind Flange mechanical connection identified as being applicable to item 58 and item 59 on isometric drawing S2-1208-ML-059. (4) each 1-1/8" studs were cut to 7-1/2" lengths with the required markings transferred to the cut pieces in accordance with Repair Replacement Plan GEN-239.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 031200045-07

Pressure: >=2325 psi

Test Temp: N/A °F

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-012-03 reconciles the replacement nuts which were certified to ASME III-2 (NC), 1989 Edition, No Addenda. SA194 Gr. 7 Nuts were substituted for SA194 Gr. 2H per SEE-92-0065.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 2-13-06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10-25-2005 to 2-17-2006, 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 4024, N, NS, I California 1862  
National Board, State, Province, and Endorsements

Date Feb. 17, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1974 Ed, Summer 1975 Add., Code Case 1781
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda
- Date: 07/05/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0164,  
040302409-08  
MO/CWO: 04032477000 06021161000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
12" 1500# POW-R-SEAL Gate Valve	WKM	495469	1694	2HV9350	1979	Corrected	Yes
Gate and Segment	Cooper Industries	94-177	N/A	RSO-0131-95, SA487 CA6NM	1994	Installed	Yes

## 7. Description of Work:

MO 04032477 replaced the gate and segment on valve in plant location 2HV9350 in accordance with ASME XI Data flag-0164. MO 06021161 located the plug/bonnet leak-off port interface and prepared U-Groove prep 3/16" deep all around and sealwelded U-Groove in accordance with weld record WR2-06-085 and RRP 040302409-08. NDE examination 2PT-104-06 was performed with satisfactory results, to verify the seal weld and the area where old sealweld was ground off are free of defects.

Note: The Gate and Segment were procured in accordance with Generic Letter 89-09.

Pressure Testing/VT-2: Performed per site procedure SO23-XVII-3.1.1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

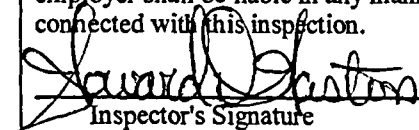
Supervising ASME Codes Engineer

Date: 7/5/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/14/05 to 7/12/06, 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

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

Date 7/12/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda.

Date: 07/04/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0388

MO/CWO: 04041167000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
1-1/2" X 2-1/2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59377-00-0002	N/A	2PSV9206 (to be rebuilt on MO 06031830)	1978	Removed	Yes
1-1/2" X 2-1/2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59377-00-0005	N/A	RSO-0757-98 (MO 98021343)	1984	Installed	Yes

## 7. Description of Work:

Replaced the relief valve in plant location 2PSV9206 with a rebuilt and tested spare valve.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 040400825-02

Pressure: ≥ 312 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: *AMer*

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 7/8/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/21/05 to 7/6/06, 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.

*Edward D. Shastan*  
Inspector's Signature

Commissions

1574

California

N&I

National Board, State, Province, and Endorsements

Date 7/12/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda; Code Case: None

Date: 07/16/04

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0274

MO/CWO: 04050054000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
1 1/4" 600# Y-Type Globe Valve	Kerotest	KP17-25	N/A	S21208MU054	1977	---	Yes
Disc	Flowserve	S/N 12, Ht. #8546J	N/A	RSO-1429-00, SA479 316/Stellite	2000	Replacement	Yes

## 7. Description of Work:

Replaced the disc in the valve located in plant position S21208MU054 (valve s/n KP17-25) with an in-kind replacement disc.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 040500017-05

Pressure: ≥ 31.9 psi

Test Temp: NOT °F

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

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed:

  
Owner or Owner's Designee, Title

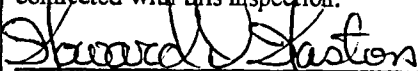
Supervising ASME Codes Engineer

Date: 7/16/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/16/04 to 7/16/04, 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.

  
Inspector's Signature

Commissions

1574

California

N & I

National Board, State, Province, and Endorsements

Date

July 16, 2004



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda.
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda
- Date: 07/05/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0068  
MO/CWO: 04060074000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Y-Type Globe Valve	Kerotest	OCA14-21	N/A	S21208MU070	1977	Corrected	Yes
Disc	Flowserve	S/N 03, Ht. #8546J	N/A	RSO-1429-00, SA479 316	2000	Installed	Yes
Bonnet	Flowserve	Ht. #150211	N/A	RSO-1456-03, SA479 316	N/A	Installed	No

## 7. Description of Work:

Replaced the disc and bonnet on the valve in plant location S21208MU070 with in-kind replacements in accordance with ASME XI Data flag-0068.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 040501779-02

Pressure:  $\geq 2325$  psi Test Temp: N/A °F

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 disc and replacement bonnet were certified to a higher code class ASME III-1 as allowed by ASME III paragraph NCA-2134.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/5/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/4/05 to 7/6/06, 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 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 6, 2006

## FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

RSO-1429-00

1. (a) Manufactured by Flowserve Corp., 701 First Street, Williamsport, PA 17701  
(Name and address of NPT Certificate Holder)
- (b) Manufactured for Edison Material Supply, P.O. Box 700, Rosemead, CA 91770  
(Name and address of Certificate Holder for component to be inspected)
2. Identification-Certificate Holder's Serial No. of Part S/N's 1 thru 12 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No. 7572608359 R/P Drawing Prepared by Flowserve Corp.
- (b) Description of Part Inspected Disc, Heat No. 8546J SA479-316
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date Sum '73, Case No. --- Class 1
3. Remarks: 2"-1500#/600# Y-Globe Valve  
(Brief description of service for which component was designed)
- Flowserve S.O. & Item No.: E-074R-1
- No hydrotest performed.

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.  
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7-28 2000 Signed Flowserve Corp. By D. Loudenloger  
(NPT Certificate Holder)

Certificate of Authorization Expires 4/15/01 Certificate of Authorization No. N1713

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at \_\_\_\_\_

Stress analysis report on file at \_\_\_\_\_

Design specifications certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

Stress analysis report certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Pennsylvania and employed by Commercial Union Insurance Company of Boston, Mass.

have inspected the part of a pressure vessel described in this Partial Data Report on 6-20-00 thru 7-28-00 19\_\_\_\_, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

Date JUL 28 2000 19- CU  
Charles Young 256  
Inspector's Signature Commissions Pennsylvania 2392  
National Board, State, Province and No.

\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 2, "Remarks".

BEST AVAILABLE COPY

4/15/00

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/23/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: GEN-240

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 04060560001

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

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Manway	CE	70602	21495	S21201ME087	1976	---	Yes
1-1/2"- 14-1/4" Plasmabond Studs (20)	Westinghouse	Ht. Code S417	N/A	RSO-1241-05, SA540 Gr B24	N/A	Installed	No
1-1/2"-8 UN Heavy Hex Nut (20)	Westinghouse	Ht. Code S406	N/A	RSO-1241-05, SA193 Gr. B7	N/A	Installed	No

## 7. Description of Work:

Replaced the Pressurizer manway cover bolting with in-kind replacement bolting in accordance with RRP GEN-240. A VT-1 examination was performed on the replacement bolting with satisfactory results.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/3/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/25/06 to 7/6/06, 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 1574 California N#1  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/06/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: GEN-205p

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 04060577001

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.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Steam Generator Manway	CE	71270-1	22218	S21301ME089P	1976	---	Yes
1-1/2" x 14-1/4" All-Thread Stud (1)	Energy Steel & Supply Co.	Ht. #96894, Lot Code DUE5	N/A	RSO-1144-97, SA540 B24 (RoR-025-03)	N/A	Installed	No
1-1/2"-8 Heavy Hex Nut (1)	Westinghouse	Ht. #7421869	N/A	RSO-2503-04, SA193 B7	N/A	Installed	No

## 7. Description of Work:

Prior to reinstalling the Steam Generator Hot leg manway, a VT-1 examination was performed on the manway cover bolting. It was discovered that the nut in hole #2 was siezed on the stud and required replacement. (1) each stud and (1) each nut were replaced for hole #2 with in-kind replacements in accordance with RRP GEN-205p. A VT-1 examination was performed on the new stud and nut with satisfactory results.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 (NB), Class 1, 1989 Ed., No Add.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/6/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/20/06 to 7/7/06, 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 1574 California NFI  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 7, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1971 Ed., Summer 1972 Add. And Code Case: N-474-1

Date: 07/06/06  
Unit: 2  
Repair/Replacement Plan: 040200422-77  
MO/CWO: 04071329000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Thermowell - INCONEL 690	Weed Instr. Co.	N15771	N/A	2TE9178-3	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18560	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N15762	N/A	2TE0111Y1 (0911-Y1)	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18555	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No

## 7. Description of Work:

Replaced the existing thermowells in plant instrument locations 2TE9178-3, and 2TE0111-Y1(2TE0911-Y1) per ECP 040200422-38. The replacement thermowells have a modified length to limit the installed insertion depth.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

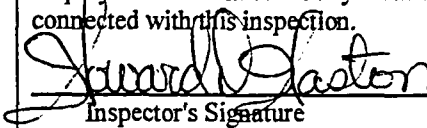
Supervising ASME Codes Engineer

Date: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/26/05 to 7/6/06, 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

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

Date July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Owner: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770<br><br>2. Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128<br><br>3. Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770<br><br>4. Identification of System: Reactor Coolant<br><br>5. (a) Applicable Construction Code: <u>ASME Section III, Class 1(NB), 1971 Ed., Summer 1972 Add. And Code Case: N-474-1</u> | Date: 04/05/06<br>Unit: 2<br>Repair/Replacement Plan: 040200422-78<br>MO/CWO: 04071330000<br>Type Code Symbol Stamp: N/A<br>Authorization No: N/A<br>Expiration Date: N/A |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Thermowell - INCONEL 690	Weed Instr. Co.	N15763	N/A	2TE9179-1	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18553	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N15757	N/A	2TE9179-3	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18568	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N15766	N/A	2TE0125-1 (0925-1)	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18559	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No

## 7. Description of Work:

Replaced the existing thermowells in plant instrument locations 2TE9179-1, 2TE9179-3, and 2TE0125-1/2TE0925-1 per ECP 040200422-38. The replacement thermowells have a modified length to limit the installed insertion depth.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi      Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/26/05 to 7/5/06, 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

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

Date

July 6, 2006

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1971 Ed., Summer 1972 Add. And Code Case: N-474-1

Date: 04/05/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 040200422-79

MO/CWO: 04071331000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Thermowell - INCONEL 690	Weed Instr. Co.	N12968	N/A	2TE9178-2	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18556	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	SCE	163-97	N/A	2TE9178-4	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18561	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N12973	N/A	2TE0115-2 (2TE0915-2)	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18562	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No

## 7. Description of Work:

Replaced the existing thermowells in plant instrument locations 2TE9178-2, 2TE9178-4, and 2TE0115-2 (2TE0915-2) per the ECP 040200422-38. The replacement thermowells have a modified length to limit the installed insertion depth.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

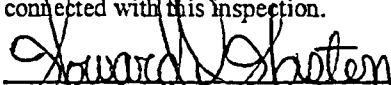
Supervising ASME Codes Engineer

Date: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/26/05 to 7/5/06, 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

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

Date: July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1971 Ed., Summer 1972 Add. And Code Case N-474-1.

Date: 04/05/06 Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 040200422-80

MO/CWO: 04071332001

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Thermowell - INCONEL 690	Weed Instr. Co.	N17026	N/A	2TE9179-4	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18554	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N15764	N/A	2TE0121-Y2 (0921-Y2)	N/A	Removed	No
Thermowell - INCONEL 690	Weed Instr. Co.	N18557	N/A	RSO-2130-04, Fabbbed under RRP-003-04	N/A	Installed	No

## 7. Description of Work:

Replaced the existing thermowells in plant instrument locations 2TE9179-4, and 2TE0121-Y2(0921-Y2) per ECP 040200422-38. The replacement thermowells have a modified length to limit the installed insertion depth.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: \_\_\_\_\_

7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/26/05 to 7/5/06, 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.

Shirley D. Shotton  
Inspector's Signature

Commissions

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

Date

July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda and Code Case N-474-1
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

Date: 01/17/06  
Unit: A  
Repair/Replacement Plan: 004b-04, 005b-04  
MO/CWO: 04090617000 04090683000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Inconel 690 Round Bar Stock (Nozzle Assy)	Special Metals Corp.	Ht. #NX3189HK	N/A	RSO-1778-03, Assy #04090617-2	N/A	—	No
SA479 Tp 316L Round Bar Stock (Safe-End)	Energy Steel & Supply Co.	Ht. #48390, Lot Code DTZ2	N/A	RSO-1133-97-01, Safe-End #04090617-B	N/A	—	No

## 7. Description of Work:

Fabricated a new half nozzle for Steam Generator primary channelhead instrument taps per SCE drawing 41116 sheet 3 and ECN A14730. The materials were machined per MO 04090617 and Repair Replacement Plan 004b-04. All welding and NDE were performed in accordance with weld record WR2/3-04-355, and MO 04090683. The completed nozzle was serialized as 005b-04 and was turned over to installation group to store for possible installation in future outage.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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 safe-end which was certified to ASME III-1 NB, 1974 Edition, Summer 1974 Addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 2-13-06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9-20-2004 to 2-16-2006, 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

8024 N.B.S. I California 1862  
National Board, State, Province, and Endorsements

Date: Feb. 16, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda (valve); Section III, Class 1, 1974 Ed., S.'74 Add. (inlet flange bolting).

Date: 06/20/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0173  
MO/CWO: 04121088000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser	BU06253	N/A	2PSV0200	1980	Removed	Yes
6" x 8" Pressurizer Safety Valve	Dresser	BU06254	N/A	RSO-2280-05	1980	Installed	Yes
2"-8UN-2A x 14-1/2" Studs (8)	Westinghouse	Ht. #1M37459, Ht. Code S404	N/A	RSO-1241-05 (7 ea.)/ RSO-1838-05 (1 ea.)	N/A	Installed	No
2"-8UN Heavy Hex Nuts (16)	Westinghouse	Ht. #8960108, Ht. Code S403	N/A	RSO-1241-05	N/A	Installed	No

## 7. Description of Work:

Replaced the pressurizer safety valve (s/n BU06253) in plant location 2PSV0200 with a rebuilt and set-point tested spare valve (s/n BU06254). Replaced the inlet flange bolting with in-kind replacement bolting (8) each studs and (16) each nuts. A VT-1 examination was performed on the replacement bolting and a VT-3 examination was performed on the internal surfaces of the replacement valve body with satisfactory results. The removed valve was placed into the rebuild program (rebuild MO 06041208).

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/30/06  
Owner or Owners Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/21/05 to 6/25/06, 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 1574 California N & I  
Inspector's Signature National Board, State, Province, and Endorsements

Date 6/25/06

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

RSO - 2280-05-00

26

1. Work performed by: NWS Technologies, LLC Purchase Order # 6F2T7901 Rel # A002  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Southern California Edison
- 3/4. Owner - name, address and identification of nuclear power plant: San Onofre Nuclear Generating Station  
Units 2/3, 5000 Pacific Coast Highway, San Clemente, CA 92672
5. a: Repaired pressure relief device: Pressurizer Safety Valve  
b: Name of manufacturer: Consolidate / Dresser  
c: Identifying nos.
- | 31709NA<br>(type)                                                     | BU06254<br>(mfr's S/N)   | n/a<br>(NB#)            | steam<br>(service)            | 6 x 8<br>(size)          | 1980<br>(yr. built) |
|-----------------------------------------------------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|---------------------|
| d: Construction Code: <u>ASME Sec. III</u><br>(name/section/division) | <u>1974</u><br>(edition) | <u>n/a</u><br>(addenda) | <u>n/a</u><br>(Code Cases(s)) | <u>1</u><br>(Code Class) |                     |
6. ASME Code Section XI applicable for inservice inspection: 1995  
(edition)
7. ASME Code Section XI used for repairs, replacements: 1995  
(edition)
8. Construction Code used for repairs, replacements: 1974  
(edition)
9. Design responsibilities: n/a
10. Opening pressure: 2485 psig  
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): As-found test, disassembled, cleaned, inspected, lapped, assembled. Certified set-pressure and seat tightness on steam.
12. Remarks: Replaced spiral wound gaskets. NWS Traveler 05-258.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2006.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2006.

10/17/05 NWS Technologies, LLC [Signature] Manager, QA  
Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 17 Oct 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

10/17/05 [Signature] NB # 8462, A, N, I NC# 1073  
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda.

Date: 07/06/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0185

MO/CWO: 04121113000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0014	N/A	2PSV8401	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0026	N/A	RSO-1824-05	1984	Installed	Yes
1-3/8" x 9" Inlet Stud (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1-3/8"- 8 Heavy Hex Nut (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

The main steam safety valve located in plant position 2PSV8401 (s/n N58737-01-0014) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0026) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031577).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-10

Pressure: ≥ 1001 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/27/05 to 7/7/06, 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

1574

California

N#I

National Board, State, Province, and Endorsements

Date 7/7/06

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by ANDERSON GREENWOOD CROSBY 6F2T9905 C/O/015/016  
(name of organization) (P.O. no., job no., etc.)  
43 Kendrick St., Wrentham, MA 02093  
(address)
2. Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  
(name and address)
3. Owner SOUTHERN CALIFORNIA EDISON COMPANY  
(name)  
(address)
4. Name, address and identification of nuclear power plant SAN ONOFRE NUCLEAR POWER PLANT
5. a. Repaired pressure relief device MAIN STEAM SAFETY RELIEF VALVE  
b. Name of manufacturer ANDERSON GREENWOOD CROSBY  
c. Identifying nos. HA-75-FN N58737-01-0026 -- STEAM 6 R 10 1984  
(type) (mfr's serial no.) (Nat'l Bd. No.) (service) (size) (year built)  
d. Construction Code ASME III 1974 S1974 -- 2  
(name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)
6. ASME Code Section XI applicable for Inservice inspection 1995 1996 --  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 --  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, modifications, or replacements 1974 S1974 --  
(edition) (addenda) (Code Case(s))
9. Design responsibilities ANDERSON GREENWOOD CROSBY
10. Opening pressure 1085 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment  
made at ANDERSON GREENWOOD CROSBY using STEAM  
(location) (test medium)
11. Description of work: (include name and identifying number of replacement parts) Valve was disassembled. Parts were inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached
12. Remarks CAPACITY 818,684 LBS/HR

R50-1824-05-08

39 A

Certificate Holder's Serial Nos. N58737-01-0026RSO-1824-05-00CERTIFICATE OF COMPLIANCE

I, Raja B. Patel certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 August 05, Signed Anderson Greenwood/Crosby Mr. Sr. QA Engineer FOR/QA MGR.  
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Vish Iyer, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on 8-23, 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed Vish Iyer  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

39 A TO FOLLOW



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/20/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0173

MO/CWO: 04121172000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda (valve); Section III, Class 1, 1974 Ed., S.'74 Add. (inlet flange bolting).

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser	BS03212	N/A	2PSV0201	1978	Removed	Yes
6" x 8" Pressurizer Safety Valve	Dresser	BS03209	N/A	RSO-2280-05	1978	Installed	Yes
2"-8UN-2A x 14-1/2" Studs (8)	Westinghouse	Ht. #1M37459, Ht. Code S404	N/A	RSO-1241-05	N/A	Installed	No
2"-8UN Heavy Hex Nuts (16)	Westinghouse	Ht. #8960108, Ht. Code S403	N/A	RSO-1241-05	N/A	Installed	No

## 7. Description of Work:

Replaced the pressurizer safety valve (s/n BS03212) in plant location 2PSV0201 with a rebuilt and set-point tested spare valve (s/n BS03209). Replaced the inlet flange bolting with in-kind replacement bolting (8) each studs and (16) each nuts. A VT-1 examination was performed on the replacement bolting and a VT-3 examination was performed on the internal surfaces of the replacement valve body with satisfactory results. The removed valve was placed into the rebuild program (rebuild MO 06041208).

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure:  $\geq 2250$  psi Test Temp:  $\geq 280$  °F

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 to be attached)

## CERTIFICATE OF COMPLIANCE

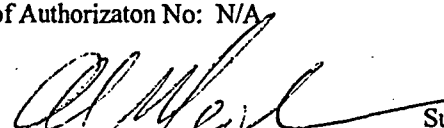
I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

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:

6/20/06

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/7/05 to 6/23/06, 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

1574

California

N & I

National Board, State, Province, and Endorsements

Date

June 25, 2006

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

5

10/24/05

1. Work performed by: NWS Technologies, LLC Purchase Order# 6F2T7901 Rel #A002  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Southern California Edison
- 3/4. Owner - name, address and identification of nuclear power plant: San Onofre Nuclear Generating Station  
Units 2/3, 5000 Pacific Coast Highway, San Clemente, CA 92672
5. a: Repaired pressure relief device: Pressurizer Safety Valve  
b: Name of manufacturer: Consolidate / Dresser  
c: Identifying nos.
- | 31709NA                                    | BS03209     | n/a        | steam           | 6 x 8        | 1976        |
|--------------------------------------------|-------------|------------|-----------------|--------------|-------------|
| (type)                                     | (mfr's S/N) | (NB#)      | (service)       | (size)       | (yr. built) |
| d: Construction Code: <u>ASME Sec. III</u> | <u>1974</u> | <u>n/a</u> | <u>n/a</u>      | <u>1</u>     |             |
| (name/section/division)                    | (edition)   | (addenda)  | (Code Cases(s)) | (Code Class) |             |
6. ASME Code Section XI applicable for inservice inspection: 1995 1996 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 1995 1996 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1974 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 2485 psig  
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): As-found test, disassembled, cleaned, inspected, lapped, assembled. Certified set-pressure and seat tightness on steam.
12. Remarks: Replaced spiral wound gaskets. NWS Traveler 05-257.

### CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2006.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2006.

10/17/05  
Date

NWS Technologies, LLC  
Repair Organization

[Signature]  
Authorized representative

Manager, QA  
Title

### CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 17 OCT. 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

10/17/05  
Date

[Signature]  
Inspector's Signature

NB # 8462, A, N, I NC# 1073

Commissions (NB (incl endorsements), jurisdiction, & no.)

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
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 Repair/Replacement Activity: 1995 Edition, 1996 Addenda
- Date: 07/06/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0186  
MO/CWO: 04121178000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

**6. Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0018	N/A	2PSV8402	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0039	N/A	RSO-1824-05	1984	Installed	Yes
1 3/8" x 9" Inlet Studs (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1 3/8"-8 Heavy Hex Nuts (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

**7. Description of Work:**

The main steam safety valve located in plant position 2PSV8402 (s/n N58737-01-0018) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0039) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031578).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-10Pressure: ≥ 1001 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: \_\_\_\_\_

7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBGT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/05 to 7/7/06, 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.

Howard Shastan  
Inspector's Signature

Commissions

1574

California

N & I

National Board, State, Province, and Endorsements

Date

7/7/06

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by	ANDERSON GREENWOOD CROSBY		6F2T9905 C/O/015/016	
	(name of organization)		(P.O. no., job no., etc.)	
	43 Kendrick St., Wrentham, MA 02093			
	(address)			
2. Work performed for	SOUTHERN CALIFORNIA EDISON COMPANY			
	(name and address)			
3. Owner	SOUTHERN CALIFORNIA EDISON COMPANY			
	(name)			
	(address)			
4. Name, address and identification of nuclear power plant	SAN ONOFRE NUCLEAR POWER PLANT			
5. a. Repaired pressure relief device	MAIN STEAM SAFETY RELIEF VALVE			
b. Name of manufacturer	ANDERSON GREENWOOD CROSBY			
c. Identifying nos.	HA-75-FN	N58737-01-0039	STEAM	6 R 10
	(type)	(mfr's serial no.)	(service)	(size)
		(Nat'l Bd. No.)		1984
d. Construction Code	ASME III	1974	S1974	2
	(name/section/division)	(edition)	(addenda)	(Code Case(s))
6. ASME Code Section XI applicable for Inservice inspection	1995	1996		
	(edition)	(addenda)		(Code Case(s))
7. ASME Code Section XI used for repairs, modifications, or replacements	1995	1996		
	(edition)	(addenda)		(Code Case(s))
8. Construction Code used for repairs, modifications, or replacements	1974	S1974		
	(edition)	(addenda)		(Code Case(s))
9. Design responsibilities	ANDERSON GREENWOOD CROSBY			
10. Opening pressure	1092 PSIG	Blowdown (if applicable)	3	% Set pressure and blowdown adjustment
made at	ANDERSON GREENWOOD CROSBY	using	STEAM	
	(location)		(test medium)	
11. Description of work: (include name and identifying number of replacement parts)	Valve was disassembled. Parts were inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached			
12. Remarks	CAPACITY 823,898 LBS/HR			

23A TO FOLLOW

Certificate Holder's Serial Nos. N58737-01-0039CERTIFICATE OF COMPLIANCE

I, Raji, S. Jali certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 August 05, Signed Anderson Greenwood/Crosby Robert J. QA Engineer In QA MGR.  
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Wish 14er, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on 8-22-2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed [Signature]  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/06/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: ASME SECTION XI  
DATA-0188

MO/CWO: 04121223000

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

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 Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0005	N/A	2PSV8404	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0042	N/A	RSO-1824-05	1984	Installed	Yes
1 3/8" x 9" Inlet Studs (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1 3/8"-8 Heavy Hex Nuts (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

The main steam safety valve located in plant position 2PSV8404 (s/n N58737-01-0005) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0042) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031580).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-10

Pressure: ≥ 1001 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 2/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/05 to 7/7/06, 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

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

Date 7/7/06

1824-05-00

15

Q.C.-434A

Sheet 1 of 2

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by ANDERSON GREENWOOD CROSBY 6F2T9905 C/O/015/016  
(name of organization) (P.O. no., job no., etc.)  
43 Kendrick St., Wrentham, MA 02093  
(address)
2. Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  
(name and address)
3. Owner SOUTHERN CALIFORNIA EDISON COMPANY  
(name)  
(address)
4. Name, address and identification of nuclear power plant SAN ONOFRE NUCLEAR POWER PLANT
5. a. Repaired pressure relief device MAIN STEAM SAFETY RELIEF VALVE
- b. Name of manufacturer ANDERSON GREENWOOD CROSBY
- c. Identifying nos. HA-75-FN N58737-01-0042 -- STEAM 6 R 10 1984  
(type) (mfr's serial no.) (Nat'l Bd. No.) (service) (size) (year built)
- d. Construction Code ASME III 1974 S1974 -- 2  
(name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)
6. ASME Code Section XI applicable for Inservice inspection 1995 1996 --  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 --  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, modifications, or replacements 1974 S1974 --  
(edition) (addenda) (Code Case(s))
9. Design responsibilities ANDERSON GREENWOOD CROSBY
10. Opening pressure 1106 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment  
made at ANDERSON GREENWOOD CROSBY using STEAM  
(location) (test medium)
11. Description of work: (include name and identifying number of replacement parts) Valve was disassembled. Parts were inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached
12. Remarks CAPACITY 834,324 LBS/HR

15A TO FOLLOW

Certificate Holder's Serial Nos. N58737-01-0042CERTIFICATE OF COMPLIANCE

I, Reja B. Patel certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 August 05, Signed Anderson Greenwood/Crosby Robert Sr. (QA Engineer) For QA MGR.  
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Vish Iyer, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have

inspected the repair, modification or replacement described in this report on 8-25-05 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed Vish Iyer  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

RSO-1824-05-00

15A

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/06/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: ASME SECTION XI  
DATA-0190

MO/CWO: 04121242000

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

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 Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0013	N/A	2PSV8406	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0041	N/A	RSO-1824-05	1984	Installed	Yes
1 3/8" x 9" Inlet Studs (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1 3/8"-8 Heavy Hex Nuts (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

The main steam safety valve located in plant position 2PSV8406 (s/n N58737-01-0013) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0041) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031584).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-10

Pressure: ≥ 1001 psi

Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/05 to 7/7/06, 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

1574 California N&I

National Board, State, Province, and Endorsements

Date 7/7/06

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by ANDERSON GREENWOOD CROSBY 6F2T9905 C/O/015/016  
(name of organization) (P.O. no., job no., etc.)  
43 Kendrick St., Wrentham, MA 02093  
(address)
2. Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  
(name and address)
3. Owner SOUTHERN CALIFORNIA EDISON COMPANY  
(name)  
(address)
4. Name, address and identification of nuclear power plant SAN ONOFRE NUCLEAR POWER PLANT
5. a. Repaired pressure relief device MAIN STEAM SAFETY RELIEF VALVE
- b. Name of manufacturer ANDERSON GREENWOOD CROSBY
- c. Identifying nos. HA-75-FN N58737-01-0041 -- STEAM 6 R 10 1984  
(type) (mfr's serial no.) (Nat'l Bd. No.) (service) (size) (year built)
- d. Construction Code ASME III 1974 S1974 -- 2  
(name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)
6. ASME Code Section XI applicable for Inservice inspection 1995 1996 --  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 --  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, modifications, or replacements 1974 S1974 --  
(edition) (addenda) (Code Case(s))
9. Design responsibilities ANDERSON GREENWOOD CROSBY
10. Opening pressure 1120 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment  
made at ANDERSON GREENWOOD CROSBY using STEAM  
(location) (test medium)
11. Description of work: (include name and identifying number of replacement parts) Valve was disassembled. Parts were inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached
12. Remarks CAPACITY 844,750 LBS/HR

PG 7A TO FOLLOW

Certificate Holder's Serial Nos. N58737-01-0041CERTIFICATE OF COMPLIANCE

I, Rajiv B. Patel certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 Aug 2005 Signed Anderson Greenwood/Crosby Robert J. S. Croft QA MGR.  
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, VISH IYER, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on 8-22-05 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed Vish Iyer  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

RSO - 1824 - 05 - 02

7A

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/06/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: ASME SECTION XI  
DATA-0191

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 04121251000

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 Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0008	N/A	2PSV8407	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0040	N/A	RSO-1824-05	1984	Installed	Yes
1 3/8" x 9" Inlet Studs (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1 3/8"-8 Heavy Hex Nuts (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

The main steam safety valve located in plant position 2PSV8407 (s/n N58737-01-0008) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0040) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031588).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-10

Pressure: ≥ 1001 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

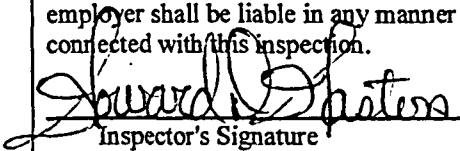
Date: 7/6/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/05 to 7/7/06, 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

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

Date July 7, 2006

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by ANDERSON GREENWOOD CROSBY 6F2T9905 C/O/015/016  
(name of organization) (P.O. no., job no., etc.)  
43 Kendrick St., Wrentham, MA 02093  
(address)
2. Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  
(name and address)
3. Owner SOUTHERN CALIFORNIA EDISON COMPANY  
(name)  
  
(address)
4. Name, address and identification of nuclear power plant SAN ONOFRE NUCLEAR POWER PLANT
5. a. Repaired pressure relief device MAIN STEAM SAFETY RELIEF VALVE  
b. Name of manufacturer ANDERSON GREENWOOD CROSBY  
c. Identifying nos. HA-75-FN N58737-01-0040 -- STEAM 6 R 10 1984  
(type) (mfr's serial no.) (Nat'l Bd. No.) (service) (size) (year built)  
d. Construction Code ASME III 1974 S1974 -- 2  
(name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)
6. ASME Code Section XI applicable for Inservice inspection 1995 1996 --  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 --  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, modifications, or replacements 1974 S1974 --  
(edition) (addenda) (Code Case(s))
9. Design responsibilities ANDERSON GREENWOOD CROSBY
10. Opening pressure 1127 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment  
made at ANDERSON GREENWOOD CROSBY using STEAM  
(location) (test medium)
11. Description of work: (include name and identifying number of replacement parts) Valve was disassembled. Parts were inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached
12. Remarks CAPACITY 849,964 LBS/HR

47 A TO FOLLOW

Certificate Holder's Serial Nos. N58737-01-0026CERTIFICATE OF COMPLIANCE

I, Raj. B. Patel certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 August '05, Signed Anderson Greenwood/Crosby Robert S. B. Engineer QA MGR.  
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Nishu Iyer, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on 8-22, 05 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed Nishu Iyer  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

RSO-1824-05-00

47A

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/06/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: ASME SECTION XI  
DATA-0191

MO/CWO: 04121321000

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

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 Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0012	N/A	2PSV8416	1976	Removed	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0035	N/A	RSO-1824-05	1984	Installed	Yes
1 3/8" x 9" Inlet Studs (12)	Westinghouse	Ht. #37751, Ht. Code S418	N/A	RSO-1241-05, SA193 B7	N/A	Installed	No
1 3/8"-8 Heavy Hex Nuts (12)	Westinghouse	Ht. #8966364Q8234, Ht. Code S396	N/A	RSO-1241-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

The main steam safety valve located in plant position 2PSV8416 (s/n N58737-01-0012) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0035) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced with Plasma Bond surface coated studs and nuts in accordance with ECP 020600146-6. The removed valve was placed into the rebuild program (ref: MO 06031575).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-11

Pressure: ≥ 1001 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/05 to 7/7/06, 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

1574 California N&I

National Board, State, Province, and Endorsements

Date 7/7/06

FORM NVR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR REPLACEMENT ☐  
 OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by ANDERSON GREENWOOD CROSBY 6F2T9905 C/O/015/016  
 (name of organization) (P.O. no., job no., etc.)  
43 Kendrick St., Wrentham, MA 02093  
 (address)

2. Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  
 (name and address)

3. Owner SOUTHERN CALIFORNIA EDISON COMPANY  
 (name)  
 (address)

4. Name, address and identification of nuclear power plant SAN ONOFRE NUCLEAR POWER PLANT

5. a. Repaired pressure relief device MAIN STEAM SAFETY RELIEF VALVE

b. Name of manufacturer ANDERSON GREENWOOD CROSBY

c. Identifying nos. HA-75-FN N58737-01-0035 -- STEAM 6 R 10 1984  
 (type) (mfr's serial no.) (Nat'l Bd. No.) (service) (size) (year built)

d. Construction Code ASME III 1974 S1974 -- 2  
 (name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)

6. ASME Code Section XI applicable for Inservice inspection 1995 1996 --  
 (edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 --  
 (edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, modifications, or replacements 1974 S1974 --  
 (edition) (addenda) (Code Case(s))

9. Design responsibilities ANDERSON GREENWOOD CROSBY

10. Opening pressure 1127 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment  
 made at ANDERSON GREENWOOD CROSBY using STEAM  
 (location) (test medium)

11. Description of work: (include name and identifying number of replacement parts) Valve was disassembled. Parts were  
inspected and refurbished. Valve was reassembled and tested in accordance with the customer's purchase order  
requirements using test procedure T-16491 Rev. 6. No weld repair performed. Bonnet Studs replaced. Certs attached

12. Remarks CAPACITY 849,964 LBS/HR

55 A TO FOLLOW

Certificate Holder's Serial Nos. N58737-01-0035**CERTIFICATE OF COMPLIANCE**

I, Reid B. Gell certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14, 2007

National Board Certificate of Authorization No. 68 to use the "NR" stamp expires DEC. 11, 2006

Date 29 August 05 Signed Anderson Greenwood/Crosby Robert S. (RA Engineer) SR/QA MGR.  
(name of repair organization) (authorized representative) (title)

**CERTIFICATE OF INSPECTION**

I, Vicki L. Yer, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on 8-24, 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date Aug 29, 2005

Signed Vicki L. Yer  
(Inspector)

Commissions MA1420 A, N, I  
(Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)

RSO-1824-05-00

55A

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
Date: 01/12/06  
Unit: 2  
Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128  
Repair/Replacement Plan: 041100199-11
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
MO/CWO: 05010435000  
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 1, 1971 Edition, Summer 1973 Addenda (Valve); ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda (Piping and installation).

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda; Code Case: N-416-2

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Y-Type Check Valve	Kerotest	MA8-14	N/A	S21208MU017	1976	Removed	Yes
2" 1513# Y-Type Check Valve	Flowserve	98AXD	N/A	RSO-1974-03	2003	Installed	Yes

## 7. Description of Work:

Replaced the Charging Pump (MP192) discharge check valve currently installed in plant position S21208MU017 in accordance with Repair Replacement Plan 041100199. Prior to installation, the replacement valve had the weld ends prepared by removal of the land such that the resultant weld ends have a bevel angle of 35 to 40 degrees. The prepared valve ends were examined prior to valve installation (2PT-001-05 and 2PT-002-05). In addition, the valve body-to-bonnet joint was seal welded. Replacement valve installed in accordance with weld records WR2-05-054 & WR2-05-055. Valve body-to-bonnet seal weld performed in accordance with WR2-05-056.

Note: NPV-I report for replacement valve has a typo for dwg. No.: 87360 s/b 83760.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- See: AR 041100199-15 Pressure: >=2335 psi Test Temp: NOT °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2-13-06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/7/05 to 7/5/06, 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 1574 California NET  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 5, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Fire Protection (Water)
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda.
- Date: 06/15/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0338  
MO/CWO: 05011285000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 150# Swing Check Valve	Anchor/Darling	EB734-1-1	N/A	SA2301MU061	1991	---	Yes
Disc	Anchor/Darling	S/N 7, Ht. Code A636	N/A	RSO-3225-92, SA105 Stellite	1992	Installed	Yes

## 7. Description of Work:

Replaced the disc in the valve located in plant position SA2301MU061 with an in-kind replacement disc in accordance with ASME XI Data Flag - 0338.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- See: AR 051001145-05 Pressure: ≥ 60 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

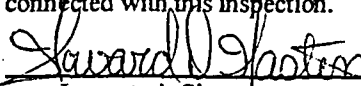
Date: 6/22/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/4/05 to 6/25/06, 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

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

Date June 25, 2006

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

As Required by the Provisions of the ASME Code Section XI

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. <b>Owner:</b> Southern California Edison Company<br/> <b>Address:</b> 2244 Walnut Grove Avenue, Rosemead, CA 91770</p> <p>2. <b>Plant:</b> San Onofre Nuclear Generating Station<br/> <b>Address:</b> P.O. Box 128, San Clemente, CA 92672-0128</p> <p>3. <b>Work Performed by:</b> Welding Services, Inc.<br/> <b>Address:</b> 2225 Skyland Court, Norcross, GA 30071</p> <p>4. <b>Identification of System:</b> Reactor Coolant System (1201)</p> | <p><b>Date:</b> 6/20/2006 <span style="float: right;"><b>Sheet 1 of 2</b></span></p> <p><b>Unit:</b> 2</p> <p><b>Repair/Replacement Plans:</b><br/>           (a) 007-05 (Temper Bead Pad)<br/>           (b) 008-05 (Sleeve Installation)<br/>           (c) 009a-05 (Heater Removal/Refurb.)<br/>           (d) 009b-05 (Heater Installation)</p> <p><b>MO/CWO:</b> 05020382000, 05071578000</p> <p><b>Type Code Symbol Stamp:</b> N/A<br/> <b>Authorization No:</b> N/A<br/> <b>Expiration Date:</b> N/A</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

5. (a) **Applicable Construction Code:** (vessel) ASME III, Class 1, 1971 Edition, Summer 1971 Addenda; (new alloy 690 material) ASME III, Class 1; 1989 Edition, No Addenda and Code Case N-474-2
- (b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda; pressure testing was performed per IWA-4540, 1998 Edition, 2000 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	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	Combustion Engineering	CE 70602	21495	S21201ME087	1976	See Description of Work below	Yes

7. **Description of Work:** Approximately 9" to 12" of length was severed from the existing alloy 600 heater sleeves leaving only a remnant section in the vessel heater sleeve bores. Alloy 690 pads were deposited on the external surface surrounding each heater sleeve penetration using a temper bead welding process. New alloy 690 partial length heater sleeves were then installed in all heater penetration locations. The new heater sleeves were attached to the temper bead weld pads via partial penetration J-groove welds. Of the 30 heater sleeve locations, new replacement heaters were installed in 24 locations, existing heaters were re-installed in 5 locations and one heater sleeve location was capped because the heater could not be removed from the vessel at that location. The materials installed during this repair activity are identified in the notes and the data table below. The repairs were performed by Welding Services, Inc (WSI) in accordance with Edison's ASME XI Repair Program and WSI's QA Program. WSI Travelers #101144-001 and 101144-002 were used for the temper bead welding and heater sleeve/heater installations and WSI Traveler #101144-004 was used to install the heater sleeve cap at the stuck heater location. ERNiCrFe-7a filler supplied by WSI was used for all welding (including temper bead pads, j-grooves and heater/sleeve cap installation welds).

**Design Documents/Drawings:**

ECP 031100614-3 (Heater Sleeve Replacement)  
 SO23-919-30, Sh 1  
 SO23-919-30, Sh 2, ECN A42052  
 SO23-919-13

ECP 050800246-3 (Heater Replacement)  
 41116, Sh 2, ECN A41908  
 SO23-919-30, Sh 4

**Reference Documents:** Relief Request ISI-3-11, Design Calculation M-DSC-356

8. **Tests Conducted:** System Leakage Test and VT-2 Examination performed per 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:** Note 1: Existing heater at pen, A4 (2ME614) was stuck in vessel and could not be removed. Lower end of heater was severed to permit heater sleeve replacement. Replacement heater sleeve has socket weld cap on end. Cap serial number is 06020298. Fabrication M.O. number serves as part serial number. Material is SB-166-N06690 from RSO 1360-97, heat# NX0264HG1, lot# 13588.
- Note 2: The heater removed from pen H4 (2ME602) was re-installed at this location, from RSO 0277-98.
- Note 3: The heater removed from pen G4 (2ME607) was re-installed at this location, from RSO 1810-98.
- Note 4: The heater removed from pen C4 (2ME609) was re-installed at this location, from RSO 1810-98.
- Note 5: The heater removed from pen G3 (2ME613) was re-installed at this location, from RSO 1810-98.
- Note 6: The heater removed from pen H3 (2ME606) was re-installed at this location, from RSO 1810-98.
- Note 7: New heater sleeve material is SB-166-N06690 from RSO 0050-05, heat# NX4417HK lot# 13. Fabrication M.O. numbers serve as part serial numbers.

### CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this 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: 

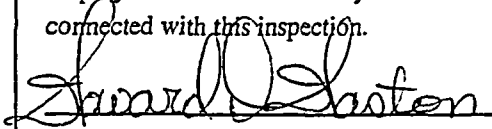
Date: 6/26, 2006

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 1/11/06 to 6/26/06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

  
Inspector's Signature

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

Date June 26, 2006

## SUPPLEMENTAL SHEET TO NIS-2 FORM

Sheet 2 of 2

1. **Owner:** Southern California Edison Company **Date:** 6/20/2006  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
2. **Plant:** San Onofre Nuclear Generating Station **Unit:** 2  
**Address:** P.O. Box 128, San Clemente, CA 92672-0128  
**Repair/Replacement Plans:**  
(a) 007-05 (Temper Bead Pad)  
(b) 008-05 (Sleeve Installation)  
(c) 009a-05 (Heater Removal/Refurb.)  
(d) 009b-05 (Heater Installation)
3. **Work Performed by:** Welding Services, Inc.  
**Address:** 2225 Skyland Court, Norcross, GA 30071
4. **Identification of System:** Reactor Coolant System **MO/CWO:** 05020382000, 05071578000
- Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** (vessel) ASME III, Class 1, 1971 Edition, Summer 1971 Addenda; (code for alloy 690 material) ASME III, Class 1; 1989 Edition, No Addenda and Code Case N-474-2
- (b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda; pressure testing was performed per IWA-4540, 1998 Edition, 2000 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	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	Combustion Engineering	CE 70602	21495	S21201ME087	1976	See Description of Work below	Yes

## PLANT EQUIPMENT/REPAIR DOCUMENT CROSS REFERENCE

Pen No	Sleeve S/N (note 7)	Heater ID S21201-	Heater S/N	Heater RSO No	Pen No	Sleeve S/N (note 7)	Heater ID S21201-	Heater S/N	Heater RSO No
A1	05051906	ME616	213	0053-06	E2	05051882	ME604	220	0053-06
A2	05051901	ME617	216	0053-06	F1	05051883	ME626	241	0053-06
A3	05051905	ME615	222	0053-06	F2	05051884	ME628	229	0053-06
A4	05051903	ME614	note 1	capped	F3	05051885	ME605	243	0053-06
B1	05051904	ME621	205	0053-06	F4	05051892	ME603	245	0053-06
B2	05051899	ME610	003	note 2	G1	05051893	ME618	209	0053-06
C1	05051898	ME620	215	0053-06	G2	05051870	ME624	037	note 5
C2	05051891	ME622	219	0053-06	G3	05051871	ME613	246	0053-06
C3	05051894	ME611	217	0053-06	G4	05051872	ME607	234	0053-06
C4	05051896	ME609	210	0053-06	H1	05051876	ME625	016	note 6
D1	05051887	ME619	208	0053-06	H2	05051877	ME629	218	0053-06
D2	05051886	ME623	027	note 3	H3	05051878	ME606	233	0053-06
D3	05051888	ME612	221	0053-06	H4	05051875	ME602	204	0053-06
D4	05051890	ME608	030	note 4	J1	05051880	ME630	201	0053-06
E1	05051889	ME627	227	0053-06	J2	05051881	ME601	212	0053-06

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06/20/06  
06/26/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
Date: 02/28/06  
Unit: 2  
Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128  
Repair/Replacement Plan: 031100614-91
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
MO/CWO: 05020603000  
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, NB (Class 1), 1971 Edition, Summer 1971 Addenda.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Steam Generator	CE	71270-1	22218	S21301ME089P	1976	Corrected	Yes
MNSA Clamp for Nozzles	SCE	2PDT0978-1, -2	N/A	UNIT 2 MNSA CLAMPS	N/A	Removed	No

## 7. Description of Work:

Removed and scrapped existing MNSA clamps on Primary instrument nozzles 2PDT-0978-1 and 2PDT-0978-2.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐
- Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer Date: 3/3/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/28/05 to 7/5/06, 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

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

Date July 5, 2006



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
Date: 07/29/05  
Unit: 2  
Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, CA 92672-0128  
Repair/Replacement Plan: ASME XI Data - 0175
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770  
MO/CWO: 05021560
4. Identification of System: Reactor Coolant System (1201/BBB)  
Type Code Symbol Stamp N/A  
Authorization No: N/A  
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., Summer 1973 Add. and Code Case 1649  
(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition; 1996 Addenda
6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 2500# Flow Control Valve	Hammel-Dahl Conflow	74/5797/001	N/A	2PV0100A	1978	Corrected	Yes
Upper Bonnet Bellows Assembly	Anchor/Darling	EZ749-2-2	N/A	RSO-0564-97	1997	Installed	Yes
Valve Plug	Anchor/Darling	Serial No. 12 Ht. No. 710436	N/A	RSO-0564-97	1997	Installed	Yes
1-1/8" X 5-3/8" Upper Bonnet Studs	Allied Nut & Bolt Co.	Ht. No. 25029-6	N/A	RSO-0564-97	1996	Installed	No

7. Description of Work:  
The upper bonnet bellows assembly (including the valve plug and upper bonnet studs) were replaced. A preservice VT-1 examination of the upper bonnet studs was performed with satisfactory results. In conjunction with a system leakage test, a VT-2 examination was performed with satisfactory results.

8. Tests Conducted: Hydrostatic:\_\_\_ Pneumatic:\_\_\_ Nominal Operating Pressure: X Exempt:\_\_\_ Other:\_\_\_  
Pressure: 2250 psia Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

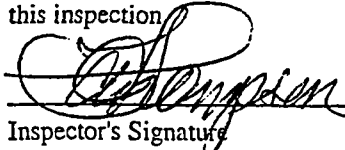
Date: 7/29, 2005

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 2-17-2005 to 8-22-2005 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

  
Inspector's Signature

Commissions California 1862, NB 8024, I, N, NS  
(National Board, State, Province, and Endorsements)

Date Aug 22, 2005

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, No Addenda & Specification SO23-926-1
- Date: 06/23/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0489,  
040901363-18, GEN-239  
MO/CWO: 05021982000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Letdown Heat Exchanger	AMETEC/WHITLOCK	78826	10781	S21208ME062	1977	Corrected	Yes
1"-8 x 36" All-Thread Stud	Mackson, Inc	Ht. #G9316	N/A	RSO-1278-05, SA564 tp 630 H1100	N/A	Installed	No
1"-8 Heavy Hex Nut	Mackson, Inc	Ht. #7240626	N/A	RSO-0087-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

Replaced Tube Side Channel Head Cover studs with new material in accordance with ECP 040901363-12 /ECN A30276. Note: Material for the channel head nuts remains unchanged. (28) each studs were cut from all-thread stock with the required markings transferred to the cut pieces in accordance with RRP GEN-239. (56) nuts were replaced with in-kind replacement nuts in accordance with ASME XI Data flag - 0489.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 040901363-19 Pressure: ≥ 312 psi Test Temp: N/A °F

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 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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

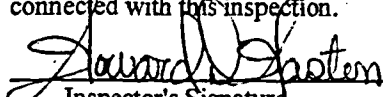
Supervising ASME Codes Engineer

Date: 7/5/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/1/05 to 7/6/06, 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

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

Date July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Component Cooling Water
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Winter 1974 Addenda.
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda
- Date: 07/03/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0105, GEN-239  
MO/CWO: 05030322000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" 150# Butterfly Valve	Fisher Controls	BF229048	4057	2HV6223	1978	---	Yes
7/8" x 36" All-Thread Stud	Mackson, Inc	Ht. #736572	N/A	RSO-2316-05, SA193 B7	N/A	Installed	No
7/8"-9 Heavy Hex Nut	Nova Machine Products	Ht. #8861040	N/A	RSO-0697-95, SA194 gr. 7 (SEE No. 92-0065)	N/A	Installed	No

## 7. Description of Work:

Replaced the flange bolting for the valve in plant location 2HV6223. Replaced (12) each studs and (24) each nuts with in-kind replacements in accordance with ASME XI Data flag-0105. (12) each studs were cut from all-thread material with the required markings transferred to the cut pieces in accordance with RRP GEN-239.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 050201702-53

Pressure: ≥ 77 psi Test Temp: N/A °F

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-012-03 reconciles the replacement nuts which were certified to ASME III-2(NC), 1989 Ed., No Add.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/6/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/30/05 to 7/6/06, 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 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 6, 2006

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Component Cooling Water
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Winter 1974 Addenda.
- Date: 07/03/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0105, GEN-239  
MO/CWO: 05030326000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

**6. Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" 150# Butterfly Valve	Fisher Controls	BF229049	4058	2HV6236	1978	---	Yes
7/8" x 36" All-Thread Stud	Mackson, Inc	Ht. #736572	N/A	RSO-2316-05, SA193 B7	N/A	Installed	No
7/8"-9 Heavy Hex Nut	Nova Machine Products	Ht. #8861040	N/A	RSO-0697-95, SA194 gr. 7 (SEE No. 92-0065)	N/A	Installed	No

**7. Description of Work:**

Replaced the flange bolting for the valve in plant location 2HV6236. Replaced (12) each studs and (24) each nuts with in-kind replacements in accordance with ASME XI Data flag-0105. (12) each studs were cut from all-thread material with the required markings transferred to the cut pieces in accordance with RRP GEN-239.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 050201702-52

Pressure: ≥ 30.5 psi Test Temp: N/A °F

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-012-03 reconciles the replacement nuts which were certified to ASME III-2(NC), 1989 Ed., No Add.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/23/05 to 7/7/06, 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

1574 California NEI  
National Board, State, Province, and Endorsements

Date July 7, 2006



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, NB (Class 1), 1971 Edition, Summer 1971 Addenda.

Date: 05/09/06  
Unit: 2  
Repair/Replacement Plan: 031100614-92  
MO/CWO: 05030534000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	CE	CE70602	21495	S21201ME087	1976	Corrected	Yes
MNSA Clamp for Nozzles	SCE	2LT-0110-1, -2	N/A	UNIT 2 MNSA CLAMPS	N/A	Removed	No

## 7. Description of Work:

Removed and scrapped existing MNSA clamps on Lower Level Instrument Nozzles 2LT-0110-1 and 2LT-0110-2.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐
- Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

## CERTIFICATE OF COMPLIANCE

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

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:

5/24/06

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/25/05 to 6/6/06, 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

National Board, State, Province, and Endorsements

Date

6/6/06

# 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  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, NB, 1974 Ed., S.75 Add., Code Cases: 1539 & 1580-1 (valve); ASME Section III, NC, 1974 Ed., S.74 Add., Code Cases: N-192-2 & N-188-1 (flex hose); ASME Section III, NB & NC, 1974 Ed., S.74 Add. (fabrication).
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Type 2, PZR Lwr Level Half Nozzle Assy	SCE	RS-002-02-1	N/A	2LT-0110-1	N/A	Installed	No
Type 2, PZR Lwr Level Half Nozzle Assy	SCE	RS-009-03-2	N/A	---	N/A	Spare	No
3/4" Globe Valve	Edward Valves Inc.	16AFS	N/A	S21201MR039, RSO-1735-93	1993	Installed	Yes
3/4" Globe Valve	Edward Valves Inc.	21AFS	N/A	RSO-1735-93	1993	Spare	Yes
3/4" x 1-1/2" Sch. 160 Pipe Nipple (2)	Consolidated Power Supply	Ht. #468373	N/A	RSO-1611-93	N/A	Installed (1), Spare (1)	No
3/4" 6000# SW Coupling (2)	Hub Inc.	Ht. #HHU	N/A	RSO-0902-93	N/A	Installed (1), Spare (1)	No
3/4" NPS x 3/8" Tube Flex Hose (2)	Parker, Metal Bellows Div.	010 (2LT-0110-1), 011 (Spare)	N/A	RSO-2939-93	1993	Installed (1), Spare (1)	Yes

## 7. Description of Work:

Two instrument root valve nozzle assemblies for the lower pressurizer level instruments were fabricated. The root valve assemblies consist of the following items: Type 2 half-nozzle nozzle, root valve, pipe nipple, coupling and flex hose assembly. One assembly, which included nozzle S/N RS-002-02-1, Valve S/N 16AFS and flex hose S/N 010 was installed in the plant at instrument location 2LT-0110-1/S21201MR039 during U2C14 and the other was staged as a spare part (AR 060301275).

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-88-008 reconciles the replacement valves which were certified to ASME III-1, 1980 Ed., S'82 Add.,  
RoR-005-03 reconciles the replacement couplings which were certified to ASME III-2, 1986 Ed., No Add.

(Applicable Manufacturer's Data Reports to be attached).

CERTIFICATE OF COMPLIANCE

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

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: 3/22/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/16/05 to 7/5/06, 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

1574

California

NIT

National Board, State, Province, and Endorsements

Date July 05, 2006

# 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  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
2. **Plant:** San Onofre Nuclear Generating Station  
**Address:** P.O. Box 128, San Clemente, CA 92672-0128
3. **Work Performed by:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. **Identification of System:** Reactor Coolant System
- Date:** 3/3/06 **Sheet 1 of 3**
- Unit:** 2
- Repair/Replacement Plan:** RRP 001a-05, RRP 001b-05,
- MO/CWO:** 05051626 000, 05051870 000 thru 05051872 000 (inclusive), 05051875 000 thru 05051878 000 (inclusive), 05051880 000 thru 05051894 000 (inclusive), 05051896 000, 05051898 000, 05051899 000, 05051901 000, 05051903 000 thru 05051906 000 (inclusive)
- Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (design), ASME Section III, Class 1, 1989 Edition, No Addenda, Code Case N-474-1 (material)

(b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 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	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Partial Length Pressurizer Heater Sleeves ( 33 each)	Edison	See Supplemental Page	N/A	027-17841	N/A	See Description of Work below	No

7. **Description of Work:**

Thirty-three 14" lengths of 1-3/4" diameter bar stock were cut from eleven each random 4' lengths of SB-166, alloy N06690 material on M.O. 05051626. All of the bar stock used was from a common heat/lot (NX4417HK/13) and RSO number (0050-05-00). The thermally treated bar stock was purchased to the requirements of Edison Specification SO23-411-56 and was certified as meeting ASME III, NB (Class 1), 1989 Edition, No Addenda.

The 33 each, 14" pieces were shipped to a gundrilling vendor for boring (P.O. 6F655005) and then to another vendor for finishing the bores using the electro-chemical machining (ECM) process (P.O. 6F575001). One of the 33 pieces was consumed in setting ECM process parameters. The remaining 32 pieces were return shipped to Edison (RSO-1490-05) after final ECM of bores.

Thirty-one of the 32 remaining gundrilled/ECM'd pieces were finish machined to final O.D. and lengths on individual M.O.s. One piece was mismachined on M.O. 05051879 (Ref. AR 050501188-37), 30 other pieces were final machined satisfactorily. The 30 final machined pieces were PT examined using ASME III, NB-2546 acceptance criteria. The one remaining gundrilled/ECM'd piece was not final machined (O.D. and length left semi-finished) is being retained in controlled storage.

Note: Pressure testing will be performed per the replacement sleeve installation documents

8. **Tests Conducted:** Hydrostatic:\_\_\_ Pneumatic:\_\_\_ Nominal Operating Pressure:\_\_\_ Exempt:\_\_\_ Other: X  
**Pressure:** N/A psi **Test Temp:** N/A °F

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 heater sleeves fabricated in this work scope were for installation in the Unit 2 Pressurizer (S21201ME087). Installation is documented on a separate NIS-2 Form.

(Applicable Manufacturer's Data Reports to be attached)

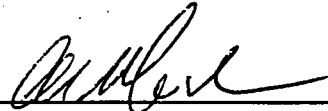
**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

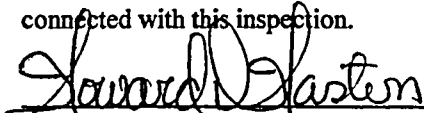
Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 5/9/06  
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 5/26/05 to 7/12/06, 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 1574 California N&I  
Inspector's Signature (National Board, State, Province, and Endorsements)

Date: July 12, 2006

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.

# SUPPLEMENTAL SHEET TO NIS-2 FORM

Sheet 2 of 3

1. **Owner:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**Date:** 3/3/06  
**Unit:** 2  
**Repair/Replacement Plan:** RRP 001a-05, RRP 001b-05
2. **Plant:** San Onofre Nuclear Generating Station  
**Address:** P.O. Box 128, San Clemente, CA 92672-0128
3. **Work Performed by:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**MO/CWO:** 05051626 000, 05051870 000 thru 05051872 000 (inclusive), 05051875 000 thru 05051878 000 (inclusive), 05051880 000 thru 05051894 000 (inclusive), 05051896 000, 05051898 000, 05051899 000, 05051901 000, 05051903 000 thru 05051906 000 (inclusive)
4. **Identification of System:** Reactor Coolant System
5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (design), ASME Section III, Class 1, 1989 Edition, No Addenda, Code Case N-474-1 (material)  
(b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda

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

Pen No	Serial No note 1	RSO No	Heat No	Lot No	Length	O.D. note 2	I.D. note 2	NDE Report
A1	05051906	0050-05	NX4417HK	13	10-1/16	1.659	1.295	2PT-062-06
A2	05051901	0050-05	NX4417HK	13	10	1.660	1.294	2PT-060-06
A3	05051905	0050-05	NX4417HK	13	9-7/8	1.659	1.294	2PT-063-06
A4	05051903	0050-05	NX4417HK	13	10-5/16	1.659	1.294	2PT-064-06
B1	05051904	0050-05	NX4417HK	13	9-7/8	1.659	1.295	2PT-065-06
B2	05051899	0050-05	NX4417HK	13	9-15/16	1.658	1.294	2PT-066-06
C1	05051898	0050-05	NX4417HK	13	9-3/4	1.659	1.294	2PT-067-06
C2	05051891	0050-05	NX4417HK	13	9-3/4	1.659	1.294	2PT-068-06
C3	05051894	0050-05	NX4417HK	13	9-7/8	1.659	1.294	2PT-069-06
C4	05051896	0050-05	NX4417HK	13	9-13/16	1.659	1.296	2PT-070-06
D1	05051887	0050-05	NX4417HK	13	10-3/16	1.659	1.294	2PT-071-06
D2	05051886	0050-05	NX4417HK	13	10-1/4	1.659	1.295	2PT-072-06
D3	05051888	0050-05	NX4417HK	13	10-7/16	1.660	1.295	2PT-073-06
D4	05051890	0050-05	NX4417HK	13	10-7/16	1.657	1.296	2PT-074-06
E1	05051889	0050-05	NX4417HK	13	11-1/16	1.659	1.295	2PT-075-06
E2	05051882	0050-05	NX4417HK	13	10-15/16	1.658	1.294	2PT-076-06
F1	05051883	0050-05	NX4417HK	13	10-13/16	1.658	1.295	2PT-077-06
F2	05051884	0050-05	NX4417HK	13	10-7/8	1.660	1.295	2PT-078-06
F3	05051885	0050-05	NX4417HK	13	10-15/16	1.659	1.295	2PT-079-06
F4	05051892	0050-05	NX4417HK	13	10-15/16	1.659	1.294	2PT-080-06

### Notes:

1. The Serial Numbers listed above are derived from the first 8 digits of the Maintenance Order Number used to fabricate the Replacement Heater Sleeve. Revision 000 of all M.O.'s apply.
2. Values listed have been rounded to three digits; Where a range was listed on the M.O., only the larger value is shown.

**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.

*ASME 5/5/06*  
*7/12/06*

## SUPPLEMENTAL SHEET TO NIS-2 FORM

Sheet 3 of 3

1. **Owner:** Southern California Edison Company **Date:** 3/3/06  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770 **Unit:** 2  
**Repair/Replacement Plan:** RRP 001a-05, RRP 001b-05
2. **Plant:** San Onofre Nuclear Generating Station  
**Address:** P.O. Box 128, San Clemente, CA 92672-0128
3. **Work Performed by:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. **Identification of System:** Reactor Coolant System
5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (design), ASME Section III, Class 1, 1989 Edition, No Addenda, Code Case N-474-1 (material)

**MO/CWO:** 05051626 000, 05051870 000 thru 05051872 000 (inclusive), 05051875 000 thru 05051878 000 (inclusive), 05051880 000 thru 05051894 000 (inclusive), 05051896 000, 05051898 000, 05051899 000, 05051901 000, 05051903 000 thru 05051906 000 (inclusive)

(b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda

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

Pen No	Serial No note 1	RSO No	Heat No	Lot No	Length	O.D. note 2	I.D. note 2	NDE Report
G1	05051893	0050-05	NX4417HK	13	10-15/16	1.657	1.296	2PT-084-06
G2	05051870	0050-05	NX4417HK	13	11	1.659	1.294	2PT-085-06
G3	05051871	0050-05	NX4417HK	13	11	1.659	1.295	2PT-086-06
G4	05051872	0050-05	NX4417HK	13	10-15/16	1.660	1.296	2PT-088-06
H1	05051876	0050-05	NX4417HK	13	11-5/16	1.657	1.294	2PT-082-06
H2	05051877	0050-05	NX4417HK	13	11-5/16	1.658	1.295	2PT-083-06
H3	05051878	0050-05	NX4417HK	13	11-5/16	1.659	1.295	2PT-089-06
H4	05051875	0050-05	NX4417HK	13	11-1/2	1.658	1.294	2PT-090-06
J1	05051880	0050-05	NX4417HK	13	12-1/16	1.659	1.294	2PT-091-06
J2	05051881	0050-05	NX4417HK	13	12-1/8	1.658	1.295	2PT-092-06

**Notes:**

- The Serial Numbers listed above are derived from the first 8 digits of the Maintenance Order Number used to fabricate the Replacement Heater Sleeve. Revision 000 of all M.O.'s apply.
- Values listed have been rounded to three digits; Where a range was listed on the M.O., only the larger value is shown.

**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.

*Handwritten:* 5/9/06  
 7/12/06



# 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  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Welding Services, Inc.  
Address: 2225 Skyland Court, Norcross, GA 30071
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, NB, 1971 Edition, Summer 1971 Addenda, Code Case: N-474-2 (for alloy 690 nozzle material).

Date: 06/01/06  
Unit: 2  
Repair/Replacement Plan: 011-05 R1, 012-06  
MO/CWO: 05061579000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer	CE	CE70602	21495	S21201ME087	1976	---	Yes
Lower level half nozzle assy, Type 2	SCE	S/N RS-002-02-01 (Note 1)	N/A	2LT-0110-1 S21201MR039 S21201ML315	N/A	Installed	No
Lower level instrument nozzle	SCE	S/N 06021452 (Note 2)	N/A	2LT-0110-2 S21201MR041 S21201ML316	N/A	Installed	No

## 7. Description of Work:

This work scope replaced the existing Alloy 600 lower level instrument nozzles at locations 2LT-0110-1 and 2LT-0110-2 with new Alloy 690 replacements. The fabrication of the replacement vessel instrument nozzles is documented separately. The field installation work scope was performed by Welding Services, Inc. (WSI).

The work was implemented by the following documents: 2LT-0110-1 location; RRP 011-05 Rev 1, WSI Traveler 101144-003 Rev 1. 2LT-0110-2 location; RRP 012-06, WSI Traveler 101144-005. CWO 05061579 is common to both locations.

Reference: AR 060200930 (field machining error on vessel at location 2LT-0110-2).

### Notes:

- See work orders 02050913, 02041362 and 05050798 for fabrication of this item. Fabrication was per the "Type 2 Pressurizer Lower Level Half Nozzle" detail of dwg 41116, Sh 2 and ISO S2-1201-ML-315. All new materials were used.
- See work order 06021452 for fabrication of this item. Fabrication was per dwg 41116, Sh 6. The existing nozzle insert assy and root valve were reused. See work order 06021448 for remachining of nozzle insert weld prep and replacement of flex hose. See dwg 41116, Sh 2 (ECN A41908) "Type 1 Pressurizer Lower Level Insert Assembly" for insert details and ISO S2-1201-ML-316 for details downstream of insert.
- Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

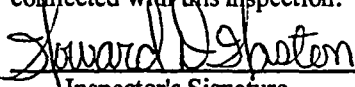
Supervising ASME Codes Engineer Date: 6/7/05

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/1/06 to 7/5/06, 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

1574 California N&T

National Board, State, Province, and Endorsements

Date

July 6, 2006

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1(NB), 1977 Ed., Winter 1979 Add.
- Date: 04/05/06  
Unit: 2  
Repair/Replacement Plan: 020701067-82  
MO/CWO: 05061934000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
- Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

**6. Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Reactor Vessel	CE	71170	22000	S21101MV001A	1976	---	Yes
Instrument Flange Adapter Hub Pen. #92	Westinghouse	Ht. #238118, Tr. #24988	N/A	RSO-1932-05, SA479 Tp. 316	N/A	Installed	No
Instrument Flange Adapter Hub Pen. #95	Westinghouse	S/N 2, Ht. #72557	N/A	RSO-2350-02, SA182 F316 (RoR-005-03)	N/A	Installed	No
Instrument Flange Adapter Hub Pen. #100	Westinghouse	S/N 1, Ht. #72557	N/A	RSO-2350-02, SA182 F316 (RoR-005-03)	N/A	Installed	No

**7. Description of Work:**

Replaced the existing instrument hubs on penetrations #92, #95 and #100. The replacement hub for penetration #92 is a 4-hole configuration (removed hub is a 5-hole). The replacement hubs for the Heated Junction Thermocouple (HJTC) penetrations #95 & #100 are returned to the OEM 6-hole configuration (removed modified hub configuration is thicker and counterbored deeper to accept longer HJTC that had in-service induced axial growth).

Pressure Testing/VT-2 performed per site procedure SO23-XVII-3.1.1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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: RCR-005-03 reconciles the replacement hub assemblies which were certified to ASME III-1(NB), 1983 Ed., Summer 1984 Addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

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:

7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT, of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/22/06 to 7/5/06, 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

1574

California

N & I

National Board, State, Province, and Endorsements

Date

July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda.
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda
6. Identification of Components:

Date: 07/06/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0252,  
030100336-64  
MO/CWO: 05070080000 06011893000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 1515# Swing Check Valve	Anchor/Darling	E-3247-2-2	N/A	S21201MU977	1984	---	Yes
Disc	Anchor/Darling	S/N 11, Ht. #42246	N/A	---	1984	Removed	Yes
Disc	Flowserve	24187-2	N/A	RSO-1836-05, SA182 F316L	2005	Installed & Corrected	Yes
5/8"-11 Heavy Hex Nut (2)	Flowserve	Ht. #75025, Tr. Code 111C	N/A	RSO-1619-05, SA194 8M	N/A	Installed	No
5/8"-11 Heavy Hex Nut (2)	Flowserve	Ht. #722308	N/A	RSO-2136-05, SA194 8M	N/A	Installed	No

## 7. Description of Work:

Inspected the valve in plant location S21201MU977 and determined that the disc required replacement. A VT-1 examination was performed on the plug studs and nuts and found (4) nuts galled. MO 05070080 replaced the disc and plug nuts with in-kind replacements in accordance with ASME XI Data flag-0252. A VT-1 examination was performed on the new plug nuts with satisfactory results. MO 06011893 machined the new disc to correct disc face to seat alignment. The machining was performed per Note 15 of drawing SO23-952-26. The minimum thicknesses for the disc specified on the drawing was maintained and verified after machining. The new surfaces created due to the machining were PT examined with satisfactory results (ref: 2PT-040-06).

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/4/05 to 7/6/06, 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

1574

California

N&I

National Board, State, Province, and Endorsements

Date

July 6, 2006

R50-1836-05-00  
Pg 30F10

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\*  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603  
(name and address of NPT Certificate Holder)
2. Manufactured for Edison Material Supply, P. O. Box 700, Rosemead, CA 91770  
(name and address of purchaser)
3. Location of installation Edison Material Supply, San Onofre Nuclear Station, San Clemente, CA 92672  
(name and address)
4. Type W8421963, R/B SA182, F316L N/A N/A 2005  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 No 1 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Disk for size 4 1515# SC Valve.

S. O. 33697

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) <u>24187-2</u>	<u>N/A</u>
(2) <u>24187-3</u>	<u>N/A</u>
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 2485 psi. Temp. 650 °F. Hydro. test pressure N/A at temp. °F  
(when applicable)

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 24187-2 through 24187-3

CERTIFICATION OF DESIGN

Design specifications certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_  
(when applicable)  
Design report\* certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_  
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)  
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006  
Date 8/25/05 Name Flowserve Corporation Signed [Signature]  
(NPT Certificate Holder) (authorized representative)

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 NC and employed by HSB CT  
of Hartford, CT have inspected these items described in this Data Report on 8-25-05, and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage  
or loss of any kind arising from or connected with this inspection.

Date 8-25-05 Signed [Signature] Commissions NC\*1421  
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1 (NB), 1971 Edition, S.71 Addenda; Code Case: N-474

Date: 01/12/06  
Unit: 2  
Repair/Replacement Plan: 010-05  
MO/CWO: 05081473000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Lower Level (Type 2) Half Nozzle	SCE	009-03-2	N/A	Fabricated on MO 03120617 & MO 03121457	2003	Corrected	No

## 7. Description of Work:

Machined the previously fabricated Pressurizer Lower Level Instrument Nozzle, Serial Number 009-03-2 down to the diameter required for the 2LT-0110-1 and 2 plant locations in accordance with Repair Replacement Plan 010-05. NDE 2PT-034-05 was performed on the newly machined surface with satisfactory results.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 2-13-06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9-1-2005 to 2-17-2006, 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

ASME N, NS, I California 1862

National Board, State, Province, and Endorsements

Date Feb. 17, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda and Code Case N-474-1

Date: 07/04/06  
Unit: 2  
Repair/Replacement Plan: 012-05, 013-05  
MO/CWO: 05110529000 05110433000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Inconel 690 Round Bar Stock (Nozzle Assy)	Special Metals Corp.	Ht. #NX3189HK, Lot 11	N/A	RSO-1778-03, Assy #05110529-1	N/A	---	No
SA479 Tp 316L Round Bar Stock (Safe-End)	Energy Steel & Supply Co.	Ht. #48390, Lot Code DTZ2	N/A	RSO-1133-97-01, Safe-End #05110529-A	N/A	---	No

## 7. Description of Work:

Fabricated a new half nozzle for Steam Generator primary channelhead instrument taps per SCE drawing 41116 sheet 3 and ECN A14730. The materials were machined per MO 05110529 and Repair Replacement Plan 012-05. All welding and NDE were performed in accordance with weld record WR2/3-05-246, and MO 05110433. The completed nozzle was serialized as 013-05 and was turned over to installation group to store for possible installation in future outage.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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 safe-end which was certified to ASME III-1 NB, 1974 Edition, Summer 1974 Addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/5/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/27/05 to 7/6/06, 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 1574 California N & I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 6, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear-Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, NB (CLASS 1), 1971 Ed, Summer 1971 Add., Code Case: None

Date: 01/24/06  
Unit: 2  
Repair/Replacement Plan: 051100503-33  
MO/CWO: 05110935000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	CE	70602	21495	S21201ME087	1976	Corrected	Yes

## 7. Description of Work:

12 additional holes were cut in the Pressurizer vessel skirt per ECP 051100503-7 to facilitate cooling of heater receptacles.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐
- Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2-13-06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-13-06 to 2-17-06, 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 1824 N.N.S. I California 1862  
National Board, State, Province, and Endorsements

Date Feb 17, 2006

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
Date: 04/11/06  
Unit: 2  
Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128  
Repair/Replacement Plan: GEN-206  
MO/CWO: 06010310000
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
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, 1980 Edition, Summer 1982 Addenda & Retrofit Seal design Spec SO23-922-196

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

**6. Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0560	N/A	S21201MP003	1978	—	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1714880-6	1166	RSO-2779-86, SO23-CART#16, Rebuild MO 06021593	1986	Removed	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1714880-7	1167	RSO-2779-86, SO23-CART#17, Rebuilt on MO 02030918	1986	Installed	Yes

**7. Description of Work:**

The RCP seal cartridge was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program. The removed seal cartridge was placed into the rebuild program.

Note: VT-2 examination performed in accordance with SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 4/12/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/30/06 to 7/5/06, 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 1574 California NFI  
Inspector's Signature National Board, State, Province, and Endorsements

Date 7/5/06



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/27/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: 060100463-9

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 06010638001 06010638000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1974 Edition, Summer 1974 Addenda.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pipe Spool	Pullman, Inc.	N-8199	N/A	S21204ML036, S2-SI-036-006	1978	Corrected	No
8" NPS Sch. 20 Pipe	Dubose National Energy	Ht. #732312, Tr. Code 26105	N/A	RSO-0172-06, SA312 Tp 304	N/A	Installed	No
1" 600# Y-Type Globe Valve	Kerotest	VH17-16	N/A	S21204MR258	1978	Removed	Yes

## 7. Description of Work:

Dry boric acid was found on drain valve S21204MR258 which was determined to be from a crack adjacent to the Weldolet branch fitting on spool 2-SI-036-006 of line S2-1204-ML-036. Removed and replaced the section of pipe containing the drain valve, and eliminated the drain valve in accordance with ECP 060100463-24 and RRP 060100463-09.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 060100463-41

Pressure: ≥ 347 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: \_\_\_\_\_

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: \_\_\_\_\_

7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/31/06 to 7/5/06, 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.

Edward J. Masters  
Inspector's Signature

Commissions

1574 California N&I

National Board, State, Province, and Endorsements

Date

July 6, 2006

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

As Required by the Provisions of the ASME Code Section XI

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Owner: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station<br/>Address: P.O. Box 128, San Clemente, California 92674-0128</p> <p>3. Work Performed by: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</p> <p>4. Identification of System: Reactor Coolant</p> <p>5. (a) Applicable Construction Code: <u>ASME Section III, Class 1 (NB), 1971 Edition, Summer '71 Addenda.</u></p> | <p>Date: 07/03/06 <span style="float: right;">Sheet 1 of 1</span></p> <p>Unit: 2</p> <p>Repair/Replacement Plan: 060100998-08</p> <p>MO/CWO: 06011050000</p> <p>Type Code Symbol Stamp: N/A</p> <p>Authorization No: N/A</p> <p>Expiration Date: N/A</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer	CE	70602	21495	S21201ME087	1976	—	Yes
2"-8UN x 14-1/2" Stud (7)	Nova Machine Products	Ht. #83633, Ht. Code LPP	N/A	RSO-0146-99, SA193 B7	N/A	Installed	No
2"-8UN x 14-1/2" Stud (1)	Mackson, Inc	Ht. #11505330	N/A	RSO-1060-02, SA193 B7	N/A	Installed	No
2"-8UN Heavy Hex Nut (12)	Nova Machine Products	Ht. #78203, Ht. Code JBX	N/A	RSO-0056-99, SA194 gr. 7	N/A	Installed	No
2"-8UN Heavy Hex Nut (2)	Mackson, Inc	Ht. #M89768, Tr. #HOO3	N/A	RSO-2377-03, SA194 gr. 7	N/A	Installed	No
2"-8UN Heavy Hex Nut (1)	Mackson, Inc	Ht. #8876873, Tr. #S298	N/A	RSO-1060-02, SA194 gr. 7	N/A	Installed	No
2"-8UN Heavy Hex Nut (1)	Nova Machine Products	Ht. 95335, Ht. Code FHZ	N/A	RSO-0904-97, SA194 gr. 7	N/A	Installed	No

7. Description of Work:

Replaced required bolting materials at spare 6" blind flange connection on S21201ME087 with in-kind replacements in accordance with RRP 060100998-08. A VT-1 examination of all new replacement fasteners was performed with satisfactory results.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- Pressure: ≥ 2250 psi      Test Temp: ≥ 280 °F

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-002-05 reconciles the replacement studs which were certified to ASME III-1(NB), 1974 Edition, S.'74 Add. RoR-007-05 reconciles the replacement nuts which were certified to ASME III-1(NB), 1974 Edition, S.'74 Add.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

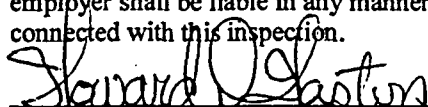
Supervising ASME Codes Engineer

Date: 7/6/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/1/06 to 7/12/06, 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

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

Date 7/12/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1 (NF), 1974 Ed., S. '74 Add. and Design Specification SO23-409-2.

Date: 03/16/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: GEN-251

MO/CWO: 06011209000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	26697	N/A	S2RC012H057	1983	Corrected	No
3/4" Load Pin	Grinnel Supply	Letter Code ZA	N/A	RSO-1222-95-01, SA564 Gr.630 @ 1075 F	1995	Installed	No

## 7. Description of Work:

Replaced the load stud with a replacement load pin on the snubber in plant location S2RC012H057 in accordance with RRP GEN-251. A VT-3 examination of the snubber assembly was performed after installation with satisfactory results.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

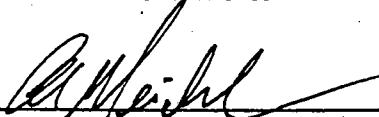
I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

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: 3/22/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/25/06 to 7/7/06, 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

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

Date

7/7/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Primary Plant Makeup
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Ed., S.'73 Add. (valve); ASME Section III, Class 2, 1974 Ed., S.'74 Add. (piping and installation).

Date: 06/13/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 060101100-12

MO/CWO: 06011272000 05011095000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 600# Check Valve	Kerotest	MA7-6	N/A	S21901MU573	1976	Removed	Yes
2" 600# Check Valve	Valcor	S/N 1	N/A	RSO-6490-85-01	1985	Installed	Yes

## 7. Description of Work:

During maintenance activities on S21901MU573 under MO 05011095000, the valve cover and body threads were galled. Complete removal of the cover was not possible and the valve required replacement. MO 06011272000 replaced the valve in accordance with ECP 060101100-15 and using weld record WR2-06-072.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 051001145-03

Pressure:  $\geq 19$  psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 6/22/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/4/05 to 6/25/06, 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 1574 California N E I  
Inspector's Signature National Board, State, Province, and Endorsements

Date 6/25/06



FORM NPV-1 N CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR PUMPS OR VALVES\*

N20531

As Required by the Provisions of the ASME Code, Section III, Div. 1

Valnor #543

1. Manufactured by Valcor Engineering Corporation, Springfield, New Jersey  
(Name and Address of Manufacturer)  
2. Manufactured for Kuehnel Power Corporation, San Clemente, California  
(Name and Address of Purchaser or Owner)  
3. Location of Installation San Onofre Nuclear Generating Station, San Clemente, California  
(Name and Address)  
4. Pump or Valve Valve Nominal Inlet Size 2 Outlet Size 2  
(Inch) (Inch)

(a) Model No., (b) N Certificate Holder's (c) Canadian

Series No. or Type	Serial No.	Registration No.	Id Drawing No	(e) Class	(f) Nat'l Bd No	(g) Year Built
-----------------------	---------------	---------------------	------------------	-----------	--------------------	-------------------

- |      | 4970000001 | 1 and 2 | N/A | 4970000001 | 2 | N/A | 1985 |
|------|------------|---------|-----|------------|---|-----|------|
| (11) |            |         |     |            |   |     |      |
| (12) |            |         |     |            |   |     |      |
| (13) |            |         |     |            |   |     |      |
| (14) |            |         |     |            |   |     |      |
| (15) |            |         |     |            |   |     |      |
| (16) |            |         |     |            |   |     |      |
| (17) |            |         |     |            |   |     |      |
| (18) |            |         |     |            |   |     |      |
| (19) |            |         |     |            |   |     |      |
| (10) |            |         |     |            |   |     |      |

5. Normally Closed Check Valve for hotared water service operating at 150 PSIG at  
(Brief description of service for which equipment was designed)

6. Design Conditions 1368 psi 250 °F or Valve Pressure Class N/A (1)

7. Cold Working Pressure 1440 psi at 100°F.

### 8 Pressure Retaining Pieces

[illegible]

(1) For manually operated valves only.

\*Supplemental information to the form is available from the ANI. It includes: (1) a list of the names of the persons who are the holders of the form, (2) a list of the names of the persons who are the holders of the form, (3) a list of the names of the persons who are the holders of the form, and (4) each additional sheet must be signed by the Certificate Holder and the ANI.

PG22



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NF), 1974 Ed., S.'74 Add. (including Code Case 1644-1/ N-71) and Design Specification SO23-409-2.

Date: 07/04/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: GEN-250, GEN-252

MO/CWO: 06011538000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Mechanical Snubber PSA-100-6"	Pacific Scientific	S/N 253	N/A	S2ST002H002	1977	Removed	Yes
Mechanical Snubber PSA-100-6"	Pacific Scientific	S/N 2383	N/A	RSO-2503-05, P/N 1801119-09	1985	Installed	No
Load Pin (2)	Pacific Scientific	Ht. #36933, Tr. Code N3254A	N/A	RSO-3278-93, SA565 Gr.630 H-1100	N/A	Installed	No

## 7. Description of Work:

The mechanical snubber located in plant position S2ST002H002 was replaced with an in-kind replacement snubber and (2) each load pins. The snubber assembly was visually examined (VT-3) after installation with satisfactory results.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. Remarks: The replacement snubber and load pins were certified to a higher code class ASME III-1 (NF) as allowed by ASME III paragraph NCA-2134.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

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

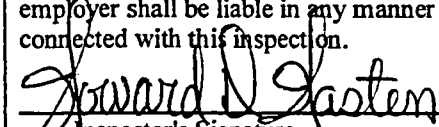
Date:

7/5/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/22/06 to 7/5/06, 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

1574

California

NPT

National Board, State, Province, and Endorsements

Date

July 12, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/23/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: 060101538-01, GEN-239

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 06011790000

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 74 Addenda

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pipe Spool	--	--	N/A	2-CS-047-033, S2-1206-ML-047	N/A	--	No
7/8"-9 x 36" All-Thread Stud	Mackson, Inc	Ht. #736572	N/A	RSO-2316-05, SA193 B7	N/A	Installed	No
7/8"-9 Heavy Hex Nut	Mackson, Inc	Ht. #247049, Ht. Code JSY	N/A	RSO-1277-05, SA194 2H	N/A	Installed	No

## 7. Description of Work:

Replaced the flange fasteners on spool piece 2-CS-047-033 in accordance with RRP 060101538. (24) each studs were cut to 5-7/8" lengths from all-thread stock with the required markings transferred to the cut pieces in accordance with RRP GEN-239. (48) each nuts were replaced with in-kind replacement nuts.

Note: Pressure test not required. Open ended system exempted per IWC-5222

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐  
Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: *Al Meier*

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer

Date: 7/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT, of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/25/06 to 7/5/06, 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.

*Howard D. Danton*  
Inspector's Signature

Commissions

1574

California

N&I

National Board, State, Province, and Endorsements

Date July 5, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2-NF, 1974 Edition, Summer 1974 Addenda and Design Specification SO23-409-2.

Date: 02/23/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: GEN-250

MO/CWO: 06011842000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Mechanical Snubber 1/4	Pacific Scientific	7128	N/A	S2-VC-058-H-004	1979	Removed	No
Mechanical Snubber PSA 1/4	Pacific Scientific	39323	N/A	RSO-0256-97, P/N 1801104-05	1997	Installed	No

## 7. Description of Work:

The mechanical snubber located in plant position S2VC058H004 was replaced in-kind. The snubber assembly was visually examined (VT-3) after installation with satisfactory results. The removed snubber was placed into the snubber rebuild program.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐
- Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

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

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 2/23/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-26-2006 to 2-24-2006, 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 9024, N, NS, I California 1862  
National Board, State, Province, and Endorsements

Date Feb. 24, 2006



# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/05/06

Sheet 1 of 1

Unit: 2

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Repair/Replacement Plan: 060101753-06

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 06011946000

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, 1971 Ed., S.'73 Add. (Valve); ASME Section III, Class 2, 1974 Ed., S.'74 Add. (Piping and installation).

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 300# Gate Valve	CCI	653361-1-1	N/A	S21208MU216	1994	Removed	Yes
3" 300# Gate Valve	Alloyco/Crane	C4940	N/A	RSO-0362-96	1996	Installed	Yes
3" NPS Sch. 40 Pipe	Dubose National Energy	Ht. Code W26538	N/A	RSO-0216-06, SA376 Tp. 304	N/A	Installed	No

## 7. Description of Work:

Replaced existing valve in plant location S21208MU216 with a similar valve in accordance with ECP 060101653-7, RRP 060101753-06 and weld records WR2-06-069 and WR2-06-070.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 060101753-10

Pressure: ≥ 37 psi

Test Temp: N/A °F

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-014-03 reconciles the replacement pipe which was certified to ASME III-2(NC), 1998 Edition, 2000 Addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/5/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/7/06 to 7/12/06, 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 1574 California N & I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 12, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/22/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 050300102-18

MO/CWO: 06012110000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

4. Identification of System: Safety Injection and Shutdown Cooling

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Winter 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
24" 150# Butterfly Valve	Fisher Controls	BF228817	4299	2HV9303	1979	Corrected	Yes

## 7. Description of Work:

Tack welded set screw to retaining ring on valve in plant location 2HV9303 in accordance with weld record WR2-06-062 and RRP 050300102-18.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☒

See: AR 050300102-14

Verified Refueling Water Tank T005 @ 83% (normal level)

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: *Al Meihl* Supervising ASME Codes Engineer Date: 7/3/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/29/06 to 7/5/06, 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.

*Edward J. Gaston* Commissions 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 5, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda, Code Case: N474-2  
(Design); ASME Section III, Class 1, 1989 Edition, No Addenda, (Material).

Date: 03/03/06

Sheet 1 of 1

Unit: N

Repair/Replacement Plan: 009-06

MO/CWO: 06020298000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Heater Sleeve Cap	Edison	06020298	N/A	RSO-1360-97, Ht. #NX0264HG1, Lot #135888	N/A	—	No

## 7. Description of Work:

A Pressurizer Heater Sleeve Cap was machined from SB-166, alloy N06690 bar stock per drawing attached to RRP 009-06. The thermally treated alloy N06690 bar stock was purchased per Edison Specification SO23-411-56 and was certified as meeting ASME III, NB, 1989 Edition, No Addenda. After completion of machining, a PT examination was performed on all surfaces using ASME III, NB-2546 acceptance criteria (reference NDE Report #2PT-093-06).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐
- Pressure: N/A psi Test Temp: N/A °F

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: This cap is intended for installation on Pressurizer S21201ME087 at penetration A4.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/3/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/16/06 to 7/5/06, 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 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 5, 2006

**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  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**Date:** 7/12/06 **Sheet 1 of 2**  
**Unit:** 2
2. **Plant:** Welding Services, Inc.  
**Address:** 2225 Skyland Court, Norcross, GA 30071  
**Repair/Replacement Plan:**  
005-06, 006-06, 007-06, 008-06, 013-06, 015-06 (Temper Bead Structural Weld Overlay)  
017-06 (Safe End Base Metal Repair)
3. **Work Performed by:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. **Identification of System:** Reactor Coolant System (1201)  
**MO/CWO:** 06020365, 06020366, 06020367, 06020367001, 06020368, 06020903, 06030624, 06030720

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (vessel)  
(b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda; Pressure testing performed per IWA-4540, 1998 Edition, 2000 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	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	CE	CE 70602	21495	S21201ME087	1976	See Description of Work below	Yes

7. **Description of Work:**

During U2C14 schedule ISI (UT) examination, indications were detected at the safety nozzle to safe end weld. This weld is a dissimilar metal weld subject to (PWSCC) and is ASME Code Class 1. On safety nozzle ISI identification number (02-005-027) and (02-005-028) axial flaws were found at the safe end weld. The safe end is austenitic stainless steel (P8). The existing weld filler is alloy 82/182 (F43 equivalent to P43) welded to low alloy (P3) nozzles. Safety valve nozzle number (02-05-028) and the pressurizer spray line (02-005-030) were acceptable ISI (UT) examination with no flaws found. A temper bead structural weld overlay repair was used on all four pressurizer dissimilar safe end welds to provide compressive residual stress in the nozzle inner surface to address the potential crack growth problem. The structural weld overlay has been deposited with inconel alloy (N06054), (ERNiCrFe-7a) filler material using the ambient temper bead installation of the weld metal overlay which is resistant to both crack initiation and propagation. On safety valve nozzle (02-005-028) a base metal weld repair was performed on the austenitic stainless steel (P8) side before the final structural weld overlay had been completed. This base metal repair was performed and completed under the Section XI program. The structural weld overlay is installed to remain in place for the design life of the repair that is defined by the evaluation.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. **Tests Conducted:** Hydrostatic:\_\_\_ Pneumatic:\_\_\_ Nominal Operating Pressure: X Exempt:\_\_\_ Other:\_\_\_  
**Pressure:** >= 2250 psi **Test Temp:** >= 280 °F

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 to be attached)

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this 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 Engineer Date: 7/13/06  
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 2/16/06 to 7/13/06, 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

1574

California

N & I

(National Board, State, Province, and Endorsements)

Date

July 13, 2006



## SUPPLEMENTAL SHEET TO NIS-2 FORM

Sheet 2 of 2

1. **Owner:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770  
**Date:** 7/12/06  
**Unit:** 2
2. **Plant:** Welding Services, Inc.  
**Address:** 2225 Skyland Court, Norcross, GA 30071  
**Repair/Replacement Plan:**  
005-06, 006-06, 007-06, 008-06, 013-06, 015-06 (Temper Bead Structural Weld Overlay)  
017-06 (Safe End Base Metal Repair)
3. **Work Performed by:** Southern California Edison Company  
**Address:** 2244 Walnut Grove Avenue, Rosemead, CA 91770
4. **Identification of System:** Reactor Coolant System (1201)  
**MO/CWO:** 06020365, 06020366, 06020367, 06020367001, 06020368, 06020903, 06030624, 06030720  
**Type Code Symbol Stamp:** N/A  
**Authorization No:** N/A  
**Expiration Date:** N/A
5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (vessel)  
(b) **Applicable Edition of Section XI Utilized for Repairs/Replacement Activity:** 1995 Edition; 1996 Addenda; Pressure testing performed per IWA-4540, 1998 Edition, 2000 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	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	CE	CE 70602	21495	S21201ME087	1976	See Description of Work below	Yes

## 7. Description of Work Continued from Page 1:

**Design Documents/Drawings:** ECP 060200222

(02-005-027) WSI Traveler Numbers: 101144-301 R0, 101144-302 R0, 101144-302 R1, 101144-303 R0 101144-304 R0, 101144-302 WI-Temp-Attachments, Weld Data Sheets: 027-WOL-R0, 027-WOL-R1, TA-027.

(02-005-028) WSI Traveler Numbers: 101144-302 R0, 101144-302 R1, 101144-303 R0, 101144-305 R1, 101144-306 R0, 101144-302 WI-Temp-Attachments, Weld Data Sheets: 028-WOL-R0, 028-WOL-R1, 028-WOL-R2, TA-028, 028-BM1 R0.

(02-005-029) WSI Traveler Numbers: 101144-302 R0, 101144-302 R1, 101144-305 R0, 101144-305 R1, 101144-302 WI-Temp-Attachments, Weld Data Sheets: 029-WOL-R0, 029-WOL-R1, 029-WOL-R2, 029-WOL-R3, TA-029.

(02-005-030) WSI Traveler Numbers: 101144-302 R0, 101144-302 WI-Temp-Attachments, Weld Data Sheets: 030-WOL-R0, TA-030.

**Reference Documents:** Relief Request ISI-3-18, Code Case: N638-1 and N504-2.

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

*APM 7/13/06*  
*KTD 7/13/06*

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/31/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

Unit: 2

Repair/Replacement Plan: GEN-207B

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 06020881000

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, Winter 1973 Addenda

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
CEDM #56 Vent Valve Assembly	ABB Combustion Engineering	1370-172	N/A	S21104CEDM #56	1978	Corrected	Yes
Vent Stem	ABB Combustion Engineering	S/N 423, Ht. #36101	N/A	RSO-1726-94, SA479 316	N/A	Installed	No

## 7. Description of Work:

Replaced the vent stem on S21104CEDM #56 vent valve assembly with an in-kind replacement.

Note: VT-2 examination performed in accordance with SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

Pressure:  $\geq 2250$  psi Test Temp: N/A °F

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 to be attached)

## CERTIFICATE OF COMPLIANCE

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

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: 03/31/06

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/15/06 to 7/5/06, 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

1574 California N&I

National Board, State, Province, and Endorsements

Date July 5, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda and SO23-408-1-1-80.

Date: 06/21/06  
Unit: 2  
Repair/Replacement Plan: ASME SECTION XI  
DATA-0249,  
060200789-04,  
050500093-03  
MO/CWO: 06020934001 06021043000,  
05061975000  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1513# Y-Type Globe Valve	Kerotest	MA2-13	N/A	S21201MU129	1976	Corrected	Yes
Disc	Kerotest	ABH23-11	N/A	RSO-2-P-1372-83	1983	Installed	Yes

## 7. Description of Work:

Valve in plant location S21201MU129 was overhauled after a failed LLRT. However, the correction required multiple iterations. MO 05050715 replaced the disc with a replacement disc and MO 05061975 removed and reinstalled the body to cover seal weld. The LLRT retest failed and the valve required rework. MO 06021043 removed and later reinstalled the body to cover seal weld and MO 06020934001 replaced the disc with an in-kind replacement disc. Note: The removed disc that was installed on MO 05050715 was subsequently discarded.

Note: Pressure Testing/VT-2 performed per procedure SO23-XVII-3.1.1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐  
Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 2/5/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/20/05 to 7/6/06, 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

1574 California NET  
National Board, State, Province, and Endorsements

Date 7/6/06

SUPPLEMENT SHEET FOR N-2

RS02-P-1372-83

54 of 69

1. (A) MANUFACTURED BY: Kerotest Manufacturing Corp., Pittsburgh, PA 15222 NU-92044 Item 42(B) MANUFACTURED FOR: Southern California Edison Company P.O. Box 700 San Clemente, CA

## 2. IDENTIFICATION -

(A) DRAWING NO.: 9911-55-(1)Z DRAWING PREPARED BY: KEROTEST MFG., CORP.(B) DESCRIPTION - SIZE 1-1/2" - 2", DISC ASSEMBLY

(C) ASME CODE SECTION III

EDITION 1971, ADDENDA DATE Summer 1973, CASE NO. N/A CLASS 1

SERIAL NO.	NAT'L BOARD	SERIAL NO.	NAT'L BOARD
2. <u>ABH23-2</u>	<u>N/A</u>	14. _____	
3. <u>ABH23-3</u>	<u>N/A</u>	15. _____	
4. <u>ABH23-4</u>	<u>N/A</u>	16. _____	
5. <u>ABH23-5</u>	<u>N/A</u>	17. _____	
6. <u>ABH23-6</u>	<u>N/A</u>	18. _____	
7. <u>ABH23-7</u>	<u>N/A</u>	19. _____	
8. <u>ABH23-8</u>	<u>N/A</u>	20. _____	
9. <u>ABH23-9</u>	<u>N/A</u>	21. _____	
10. <u>ABH23-10</u>	<u>N/A</u>	22. _____	
11. <u>ABH23-11</u>	<u>N/A</u>	23. _____	
12. <u>ABH23-12</u>	<u>N/A</u>	24. _____	
13. _____		25. _____	

3. REMARKS: SPARE PARTS FOR NUCLEAR VALVES(2 SHEETS N-2 and SUPPLEMENT SHEET)SIGNED: KEROTEST MFG., CORPORATION BY: Mary F. Luzzi DATE 7/8/83AUTHORIZED NUCLEAR INSPECTOR BY: Michael R. Gunkel DATE 7/11/83

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\*

RS02-1-1372-83

53469

As required by the Provisions of the ASME Code Rules

1 of 2

1. (a) Manufactured by Kerotest Manufacturing Corp., Pittsburgh, PA 15222 NUI-92044 Item 42  
(Name and address of Manufacturer of part)
- (b) Manufactured for Southern California Edison Company P.O. Box 700 San Clemente, CA 92672  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part ABH23-1 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No. 9911-55-(1)Z Drawing Prepared by Kerotest Mfg., Corporation
- (b) Description of Part Inspected 1-1/2" - 2" DISC ASSEMBLY
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date S/73, Case No. N/A Class 1
3. Remarks: SPARE PARTS FOR NUCLEAR VALVES  
(Brief description of service for which component was designed)  
(2 SHEETS N2 & SUPPLEMENT SHEETS)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.  
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date July 8, 19 83 Signed Kerotest Mfg., Corporation Mary Felitti  
(Manufacturer)

Certificate of Authorization Expires 4-25-86 Certificate of Authorization No. 1903

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at \_\_\_\_\_

Stress analysis report on file at \_\_\_\_\_

Design specifications certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

Stress analysis report certified by \_\_\_\_\_ Prof. Eng. State \_\_\_\_\_ Reg. No. \_\_\_\_\_

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Pennsylvania and employed by HSB I&I COMPANY of HARTFORD, CONNECTICUT

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 7/11/83 19 83, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date 7/11/83 19 83

Michael R. Upchurch  
Inspector's Signature

Commissions PA2187  
National Board, State, Province and No.

\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1-2 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks".

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/23/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 051100503-55

MO/CWO: 06021448001

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1 (NB), 1971 Edition, Summer 1971 Add. (vessel); ASME Section III, Class 2, 1974 Ed., S.74 Add. (flexhose), Code Case: N-192 and N-188-2

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer Vessel	CE	CE70602	21495	S21201ME087	1976	---	Yes
Lower Level Instrument Nozzle Assy (existing)	SCE	S/N 06021452	N/A	2LT-0110-2	2006	---	No
Flexhose	Parker	S/N 008	N/A	RSO-1456-93	1993	Installed	Yes

## 7. Description of Work:

The existing nozzle insert assembly removed from the pressurizer lower level instrument location 2LT-0110-2, which includes valve S21201MR041 was re-installed after a new vessel nozzle was installed at that location during R2C14 refueling outage. This work scope re-machined the weld prep that attaches to the vessel nozzle, inspected the nozzle dimensionally and performed a PT examination of the newly machined area. Some gouges were ground into the nozzle insert assembly during removal from the vessel. AR assignment 051100503-58 evaluated this condition and provided a basis for acceptance after the areas were blended and PT examined. The flexhose on the downstream side of the root valve (ASME III, Code Class 2) was also replaced with a new replacement in accordance with Weld record WR2-06-082. The refurbished nozzle insert assembly was installed in the 2LT-0110-2 location of the Pressurizer by a contractor. The installation is covered on separate documentation (ref: CWO 05061579).

VT-2 performed per SO23-XVII-3.1.1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐  
Pressure: ≥ 2250 psi Test Temp: ≥ 280 °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: Robert G. Sears Supervising ASME Codes Engineer Date: July 12, 2006  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/24/06 to 7/12/06, 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.

Howard O. Gaston Commissions 1574 California N&I  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 12, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., Summer 1971 Add., Code Case: N474-2 (design); ASME III, Class 1, 1989 Edition, No Add. (material).

Date: 03/09/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 010-06 R1

MO/CWO: 06021452000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer	CE	70602	21495	S21201ME087	1976	—	Yes
INCONEL 690 Bar Stock	Coulter Steel & Forge Co.	Ht. #NX0264HG1, Lot #135888	N/A	RSO-1360-97, 2LT-0110-02, S/N 06021452	N/A	—	No

## 7. Description of Work:

Fabricated a new Pressurizer stepped oversize half nozzle for plant location 2LT-0110-2 per SCE drawing 41116 sheet 6. The materials were machined and NDE performed in accordance with Repair Replacement Plan 010-06 Rev. 1. The completed nozzle was turned over to PM&ES for installation.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

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

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: 4/10/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/24/06 to 7/5/06, 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

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

Date July 5, 2006

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NF), 1974 Edition, Summer 1974 Addenda and Design Specification SO23-409-2.

Date: 07/04/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: GEN-250

MO/CWO: 06030450000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Mechanical Snubber PSA-100-6"	Pacific Scientific	S/N 2340	N/A	S2ST001H021	1985	Removed	No
Mechanical Snubber PSA-100-6"	Pacific Scientific	S/N 2336	N/A	RSO-2503-05, P/N 1801119-09	1985	Installed	No

## 7. Description of Work:

The mechanical snubber located in plant position S2ST001H021 was replaced in-kind. Prior to installation, the replacement snubber was functionally tested in accordance with procedures SO23-I-2.39. A VT-3 examination was performed on the snubber after installation with satisfactory results.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☐

Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

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

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 7/5/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/7/06 to 7/6/06, 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 1574 California N # I  
Inspector's Signature National Board, State, Province, and Endorsements

Date 7/6/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
Date: 07/07/06  
Unit: 2  
Sheet 1 of 1
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128  
Repair/Replacement Plan: 060400097-37  
MO/CWO: 06040517000 06040160000
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A
4. Identification of System: Auxiliary Feedwater System
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 900# Y-Globe Lift Check Valve	Atwood & Morrill	1-16188-01	N/A	S21305MU124	1991	Corrected	Yes
Poppet	Weir Valve & Controls	S/N 1	N/A	RSO-0706-06, SA479 304		Installed	Yes

## 7. Description of Work:

Replaced poppet in the check valve in plant location S21305MU124 with one made of solid SA479 -304 stainless steel in accordance with ECP 060400097-27. MO 06040160000 disassembled valve S21305MU124 and MO 06040517000 replaced the poppet and reassembled the valve in accordance with RRP 060400097-37.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐
- See: AR 060400097-06 Pressure: ≥ 999 psi Test Temp: N/A °F

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:

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 7/8/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/8/06 to 7/7/06, 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

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

Date 7/12/06

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

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

Date: 07/07/06

Sheet 1 of 1

Unit: 2

Repair/Replacement Plan: 060400097-40

MO/CWO: 06040519000

Type Code Symbol Stamp: N/A

Authorization No: N/A

Expiration Date: N/A

2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

4. Identification of System: Auxiliary Feedwater System

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 900# Y-Globe Lift Check Valve	Atwood & Morrill	2-16188-01	N/A	S21305MU448	1991	Corrected	Yes
Poppet	Weir Valve & Controls	S/N 2	N/A	RSO-0706-06, SA479 304		Installed	Yes

## 7. Description of Work:

Replaced poppet in the check valve in plant location S21305MU448 with one made of solid SA479 -304 stainless steel in accordance with RRP 060400097-40 and ECP 060400097-27.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other ☐

See: AR 060400097-41

Pressure: ≥ 998 psi Test Temp: N/A °F

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 to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements 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 Engineer Date: 7/8/06  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/8/06 to 7/7/06, 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 CA 1574 California NFI  
Inspector's Signature National Board, State, Province, and Endorsements

Date July 12, 2006  
[Signature]

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station  
Address: P.O. Box 128, San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company  
Address: 2244 Walnut Grove Avenue, Rosemead, California 91770
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1974 Edition, Summer 1974 Addenda; Code Case: None

Date: 01/09/06  
Unit: 2  
Repair/Replacement Plan: 980402408-6, GEN-239  
MO/CWO: 98041924003  
Type Code Symbol Stamp: N/A  
Authorization No: N/A  
Expiration Date: N/A

Sheet 1 of 1

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

## 6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" 300# Flange Connection	Allegheny Ludlum	2-RC-134-006	N/A	S21201ML134	N/A	Corrected	Yes
1"-8 x 36" All Thread Stud (4)	Mackson, Inc	Ht. #G9316	N/A	RSO-1278-05, SA564 gr. 630	N/A	Installed	No
1"-8 Heavy Hex Nuts (19)	Mackson, Inc	Ht. #542535, Ht. Code BFB	N/A	RSO-1593-05, SA564 gr. 630	N/A	Installed	No
1"-8 Heavy Hex Nuts (13)	Mackson, Inc	Ht. #527282	N/A	RSO-1593-05, SA564 gr. 630	N/A	Installed	No

## 7. Description of Work:

Found the bolting material for the spectacle flange located upstream of Unit 2 Return from Spent Fuel Pool Cooling Valve S21201MU033 to be degraded and in need of replacement. The material was upgraded for the spectacle flange Stud Bolts and Hex Nuts (Items 2 & 3, resp., on S2-1219-ML-007, Sh. 1) from low alloy steel (SA-193 Grade B7) to the more corrosion resistant SA-564 Type 630 Condition H1100 in accordance with ECP 980402408-8. (16) each studs and (32) each nuts were replaced. (16) each replacement studs were cut to 8-1/2" lengths from all-thread material with the required markings transferred to the cut pieces in accordance with Repair Replacement Plan GEN-239.

Note: Normal spent fuel pool head pressure was used for test pressure.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other ☒
- Pressure: N/A psi Test Temp: N/A °F

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

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

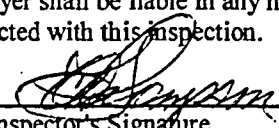
Date: 2/13/06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of **California**, and employed by **HSBCT of Hartford, Connecticut** have inspected the components described in this Owner's Report during the period 6/2/05 to 7/17/06, 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

8725 NE California 1862  
National Board, State, Province, and Endorsements

Date July 17, 2006