

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,

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Enclosure: Inservice Inspection Summary Report

-2-

July 21, 2006 Owner's Report of ISI

cc: B.S. Mallett, Regional Administrator, NRC Region IV

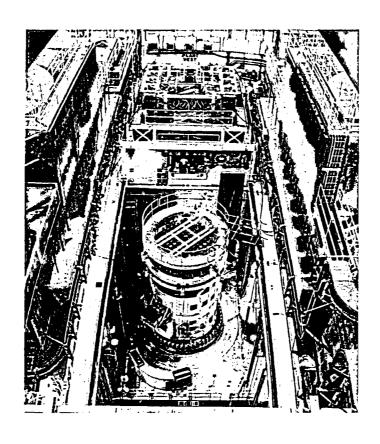
D. D. Chamberlain, Director, Division of Reactor Safety, NRC Region IV

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> | DATES                              |
|----------------|------------------------------------|
| 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:

TOURS SOMETHING IN IN-

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<br>or<br>Appurtenance         | Manufacturer<br>or<br>Installer | Manufacturer<br>or Installer<br>Serial Number | State or<br>Province<br>Number | National<br>Board<br>Number |
|---|---------------------------------|---|--------------------------------|-----------------------------|
| Reactor Vessel<br>2MV001                | Combustion<br>Engineering       | 71170   | 35203-82                       | 22000                       |
| Pressurizer<br>2ME087                   | Combustion<br>Engineering       | 70602   | 35203-82                       | 21495                       |
| Reactor Coolant<br>Pump 2MP003          | Byron Jackson                   | 701-N-0560                                    | N/A                            | N/A                         |
| Steam Gen<br>2ME088                     | Combustion<br>Engineering       | 71270-2                                       | 35203-82                       | 22219                       |
| Steam Gen Combustion 2ME089 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-Yr2nd 10-YrX_3rd 10-Yr4th 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 & TestsSee 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 |

personal injury or property damage or a loss of any kind arising from or connected with this inspection. Inspector's Signature Commissions CA 1574

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

NB, State, Province or Endorsements

Date: 7/21/04

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

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

List of inservice examinations and tests performed from 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.

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## **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

|              |  |                |                 |                       |               |  | Percentage of            |
|--------------|--|----------------|-----------------|-----------------------|---------------|--|--------------------------|
|              |  |                |                 |                       |               | Number of  | examinations completed   |
|              |  | Examinations   |                 |                       |               | examinations                                     | for 1st the Period(U2C13 |
|              |  | Required,      | Period-1,       | Period-2,             | Period-3,     | completed  | & U2C14) of the 3rd      |
| Subsection   | Category   | See Note-1     | See Note-2      | See Note-2            | See Note-2    | during U2C14                                     | Interval, See Note-3     |
| WB           | 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 out   | age prior to p        | lant startup  | 100%   | 100%                     |
|              | B-Q  |                |                 | chnical Specification |               |  |                          |
| WC           | 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%                      |
|              | С-Н  | Each inspecti  | on period       |                       | <del> </del>  | <del>                                     </del> | 100%                     |
| IWD          | D-A  | 61             | 24              | 20                    | 20            | 0  | 39%                      |
|              | D-B  | Each inspecti  |                 |                       |               | <del> </del>                                     | 100%                     |
| IWF          | F-A  | 289            | 115             | 96                    | 96            | 22   | 40%                      |
|              | <del>                                     </del> | Containment    | General         | General               |               |  |                          |
| IWE          | E-A  | Surfaces       | Visual          | Visual                | Visual VT-3   | lo   | 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          |
| <del></del>  | E-G  | 101            | 0               | 0                     | 101           | 0  | 0%, See note-5           |
| IWL          | L-A  | Once in every  | ten vears       |                       |               |  | 100%, See note-5         |
|              | L-B  | Once in every  |                 | <u> </u>              |               |  | 100%, Seenote-5          |
|              |  | † <i>'</i>     | T               |                       |               |  |                          |
| Augmented    | ISI for the                                      | Reactor cools  | ant pump flyv   | vheels and h          | igh energy pi | ping   |                          |
|              |  |                | Ţ <del>_'</del> |                       |               | T  |                          |
|              | Flywheel   | s 4            | 0               | 0                     | 4             | 0  | 0%                       |
|              | High   |                |                 |                       |               |  |                          |
|              | energy   |                |                 | 1                     | 1             | 1  |                          |
|              | piping   |                |                 | 1                     | 1             | 1  |                          |
|              | welds  | 183            | 59              | 62                    | 62            | lo   | 32%                      |
|              |  |                | <del> </del>    | 1                     |               |  | <del> </del>             |
| Notes : 1) F | Required F                                       | Examinations s | ubiect to cha   | nge based o           | n             | 1  | <del></del>              |
| a) Plant Mo  |  |                | T               | 1                     | <u> </u>      |  |                          |
|              |  | Regulatory Gu  | ide 1 147 In    | service Inspe         | ection Code ( | Case Acceptabi                                   | lity                     |

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

| ASME Section XI, Division 1                                 | <del></del>      |                 |                    |
|---|------------------|-----------------|--------------------|
| c) Periodic update of 10CFR 50.55a Codes and Standard       | Is               |                 |                    |
| d) Approval or disapproval of relief requests submitted to  | the NRC inaccor  | dance with 10CF | R 50.55a           |
| e) Industry events which may impact RI-ISI program          |                  |                 |                    |
| 2) Number of examinations scheduled for a period may c      |                  |                 |                    |
| a) Component accessibility because of high radiation or c   | contaimination   |                 |                    |
| 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, re | pair or volumetric |
| examination   |                  |                 |                    |
| 5) The initial 120 months (1st interval) for containment IS |                  |                 |                    |
| 1998, and scheduled to end on September 8, 2008, in ac      | cordance with 10 | CFR 50.55a(b)(2 | 2)(vi)             |

# 5 ATTACHMENT- 2

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

| ICI DECIONATION |                                |       |          | CODE     |             | <del></del> |        |
|-----------------|--------------------------------|-------|----------|----------|-------------|-------------|--------|
| ISI DESIGNATION |                                | CODE  | CODE     | ITEM     | }           |             |        |
| NUMBER          | COMPONENT EXAMINED OR TESTED   | CLASS | CATEGORY | NUMBER   | EXAMINATION |             | 1ETHOD |
| ,               |                                |       |          | 1        | VOLUMETRIC  |             | VISUAL |
|                 |                                |       | <u> </u> | <u> </u> | EXAM        | EXAM        | EXAM   |
| 02-001-057-01   | REACTOR VESSEL CLOSURE NUT #1  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #2  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #3  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #4  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #5  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #6  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #7  | 1     | BG1      | B6.10    |             |             | VT-1   |
|                 | 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   |
|                 | 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   |
|                 | REACTOR VESSEL CLOSURE NUT #28 |       |          | B6.10    |             | ·           | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #29 |       |          | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #30 |       |          | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #31 |       |          | B6.10    |             |             | VT-1   |
|                 | REACTOR VESSEL CLOSURE NUT #32 | 1     |          | B6.10    |             |             | VT-1   |

| 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  | 1  | 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 |

| 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 |   |      |
|                                       | LOWER SHELL LONGITUDINAL WELD @ 90    |   |     |        |    |   |      |
| 02-005-003                            | 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 |   |      |
| · · · · · · · · · · · · · · · · · · · | SAFETY NOZZLE-TO-TOP HEAD WELD @ 45   |   |     |        |    |   |      |
| 02-005-011                            | DEGREES                               | 1 | B-D | B3.110 | UT | ĺ |      |

|               | SAFETY NOZZLE-TO-TOP HEAD WELD @ 225      | $\overline{1}$ |      | ·      |    |   |       |
|---------------|---|----------------|------|--------|----|---|-------|
| 02-005-012    | DEGREES                                   | 1              | B-D  | B3.110 | UΤ | ] |       |
|               | SAFETY NOZZLE-TO-TOP HEAD WELD @ 315      |                |      |        |    |   |       |
| 02-005-013    | DEGREES                                   | 1              | B-D  | B3.110 | UT | İ |       |
| 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  |
|               | SAFETY NOZZLE-TO-SAFE END WELD @ 45       |                |      |        |    |   |       |
| 02-005-027    | DEGREES                                   | 1              | B-F  | B5.40_ | UT |   |       |
|               | SAFETY NOZZLE-TO-SAFE END WELD @ 225      |                |      |        |    |   | ľ     |
| 02-005-028    | DEGREES                                   | 1              | B-F_ | B5.40_ | UT |   |       |
|               | SAFETY NOZZLE-TO-SAFE END WELD @ 315      |                |      |        |    |   |       |
| 02-005-029    | 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 |   |       |
|               | SAFE END-TO-PIPE FLANGE FOR SAFETY NOZZLE |                |      |        |    |   | 1     |
| 02-005-034    | @ 45 DEGREES                              | 1              | B-J  | B9.11  | UT |   |       |
| 02-006-009    | DRAIN NOZZLE-TO-PIPE WELD                 | 1              | B-J  | B9.32  | UT |   |       |

| Å.         | DRAIN NOZZLE-TO-PIPE WELD (AREA 2C9, 24'   | T  |     |        |    |             |      |
|------------|--|----|-----|--------|----|-------------|------|
| 02-008-018 | ELEV.)                                     | 1  | B-J | B9.32  | UT |             |      |
| 02-012-018 | DRAIN NOZZLE-TO-PIPE WELD                  | 1  | B-J | B9.32  | UT | <del></del> |      |
| 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 |
|            | SIDE PLATE BOLTING (2 PLACES) (DRAWING NO. |    |     |        |    |             |      |
| 02-018-003 | SO23-408-1-6-46)                           | 1  | BG2 | B7.70  | J  |             | 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 |             |      |
|            | VALVE BODY LOWER SECTION WELD (DRAWING     |    |     |        |    |             |      |
| 02-019-010 | NO. SO23-507-5-1-22)                       | 1  | BM1 | B12.40 |    | PT          |      |
| 02-019-110 | GUIDE W/INTEGRALLY WELDED LUGS             | 1  | В-К | 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 |             |      |
|            | SWAY STRUT (FORMERLY 02-021-072)(SNUBBER   |    |     |        |    |             |      |
| 02-021-071 | REPLACED DCP 2-6683.2BP)                   | 1  | F-A | F1.10A |    |             | VT-3 |
|            | LOWER BONNET LOWER WELD (DRAWING NO.       |    |     |        |    |             |      |
| 02-022-016 | SO23-950-148-3)                            | 1  | BM1 | B12.40 | 1  | PT          |      |
|            | LOWER BONNET UPPER WELD (DRAWING NO. SO23  |    |     |        |    |             |      |
| 2-022-017  | 950-148-3)                                 | 1  | BM1 | B12.40 | 1  | PT          | 1    |

|            | SWAY STRUT (SNUBBER REPLACED DCP 2-          |     |     |        |     |    |      |
|------------|--|-----|-----|--------|-----|----|------|
| 02-022-024 | 6683.2BP)                                    | 1   | F-A | F1.10A | J   |    | VT-3 |
|            | AXIAL STOP & Y-STOP W/INTEGRALLY WELDED      |     |     |        |     |    |      |
| 02-023-028 | LUGS   | 1   | B-K | B10.20 |     | PT | j    |
| 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 |
|            | 2" SCH 160 TEE-TO-PIPE (ADDED BY DCN #1 TO   |     |     |        | 1   |    |      |
| 02-026-210 | S21201ML060 REV 11)                          | ]1  | B-J | B9.21  | JUT |    |      |
|            | 2" SCH 160 ELBOW-TO-PIPE (ADDED BY DCN #1 TO |     |     |        |     |    |      |
| 02-026-250 | S21201ML060 REV 11)                          | 1   | B-J | B9.21  | UT  | Ì  |      |
| 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  |    |      |
| 2-036-027  | REACTOR COOLANT PUMP STUD                    | 1   | BG1 | B6.180 | UT  |    |      |
| 2-036-028  | REACTOR COOLANT PUMP STUD                    | 1   | BG1 | B6.180 | UT  |    |      |
| 2-036-029  | REACTOR COOLANT PUMP STUD                    | 1   | BG1 | B6.180 | UT  |    |      |
| 2-036-030  | REACTOR COOLANT PUMP STUD                    | 1   | BG1 | B6.180 | UT  |    |      |
| 2-036-037  | REACTOR COOLANT PUMP NUT                     | 1   | BG1 | B6.200 |     |    | VT-1 |

| 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 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. | ,  |     |        |      |
| 02-036-080 | NO. SO23-922-157)                         | ]1 | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-081 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-082 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-083 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-084 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. | ]. |     |        |      |
| 02-036-085 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-086 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-087 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-088 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
| -          | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-089 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    | }   |        |      |
| 02-036-090 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-091 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-092 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |
|            | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. |    |     |        |      |
| 02-036-093 | NO. SO23-922-157)                         | 1  | BG2 | B7.60  | VT-1 |

|                 | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG.             |          |                    |                 |                |                  |      |
|-----------------|---|----------|--------------------|-----------------|----------------|------------------|------|
| 02-036-094      | NO. SO23-922-157)                                     | 1        | BG2                | B7.60           |                |                  | VT-1 |
|                 | HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG.             |          |                    |                 |                |                  |      |
| 02-036-095      | 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 LEAKAG   | E 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        | С-Н                | VT-2            |                |                  |      |
| CODE CASES API  | L<br>PLICABLE TO THIRD TEN-YEAR ISI INTERVAL 1) N-460 | 2) N-481 | <br>  3) N-498-1 4 | l<br>1) N-504-2 | 5) N-522 6) N- | <br>598 7) N-638 | 3-1  |

## 6 ATTACHMENT-3

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

|    | MO          | EQID              | Class | NIS-2    | Worksum   |
|----|-------------|-------------------|-------|----------|---|
| 1  | 03050053000 | S21201MU976       | 111-1 | 07/07/06 | Replaced disc                                     |
| 2  | 03061838000 | 2PV0201B          | III-2 | 09/26/05 | Replaced valve spindle (plug)                     |
| 3  | 03080640001 | S21204MU019       | 111-1 | •        | Replaced check valve                              |
| 4  | 03120409000 | S21208MU001       | III-2 | 07/06/06 | Replaced disc                                     |
| 5  | 03120413000 | S21208MU020       | 111-2 | 06/25/06 | Replaced disc                                     |
| 6  | 03121523000 | S21204MR398       | 111-2 | 08/22/05 | Replaced flange bolting                           |
| 7  | 04010830001 | S21208ML059       | III-2 | 02/17/06 | Replaced blind flange bolting                     |
| 8  | 04032477000 | 2HV9350           | 111-1 | 07/12/06 | Replaced gate and segment                         |
| 9  | 04041167000 | 2PSV9206          | III-2 | 07/12/06 | Replaced relief valve                             |
| 10 | 04050054000 | S21208MU054       | 111-2 | 07/16/04 | Replaced valve disk                               |
| 11 | 04060074000 | S21208MU070       | 111-2 | 07/06/06 | Replaced valve disc and bonnet                    |
| 12 | 04060560001 | S21201ME087       | 111-1 | 07/06/06 | Replaced manway cover bolting                     |
| 13 | 04060577001 | S21301ME089P      | 111-1 | 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       | 111-1 | 07/06/06 | Replaced thermowells                              |
| 18 | 04090617000 | 027-17643-ASSY #2 | 111-1 | 02/16/06 | Fabricated SG instrument half-nozzle              |
| 19 | 04090683000 | 027-17643-ASSY #2 | 111-1 | 02/16/06 | Fabricated SG instrument half-nozzle              |
| 20 | 04120965000 | S21301ME088       | III-2 | •        | Replaced SG handhole cover bolting                |
| 21 | 04121088000 | 2PSV0200 ·        | 111-1 | 06/25/06 | Replaced valve and inlet bolting                  |
| 22 | 04121113000 | 2PSV8401          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 23 | 04121172000 | 2PSV0201          | 111-1 | 06/25/06 | Replaced valve and inlet bolting                  |
| 24 | 04121178000 | 2PSV8402          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 25 | 04121223000 | 2PSV8404          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 26 | 04121242000 | 2PSV8406          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 27 | 04121251000 | 2PSV8407          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 28 | 04121257001 | S21305MU129       | III-2 | *        | Replaced retaining ring                           |
| 29 | 04121321000 | 2PSV8416          | 111-2 | 07/07/06 | Replaced safety valve and inlet bolting           |
| 30 | 05010435000 | S21208MU017       | 111-2 | 07/05/06 | Replaced check valve                              |
| 31 | 05011095000 | S21901MU573       | III-2 | 06/25/06 | Inspected valve                                   |
| 32 | 05011285000 | SA2301MU061       | 111-2 | 06/25/06 | Replaced disc                                     |
| 33 | 05020382000 | S21201ME087       | 111-1 | 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    | JII-1 | 08/22/05 | Replaced upper bonnet bellows assembly             |
| 36 05021982000 | S21208ME062 | 111-2 | 07/06/06 | Replaced tube side channel head cover bolting      |
| 37 05030322000 | 2HV6223     | 111-2 | 07/06/06 | Replaced flange bolting                            |
| 38 05030326000 | 2HV6236     | 111-2 | 07/07/06 | Replaced flange bolting                            |
| 39 05030534000 | S21201ME087 | 111-1 | 06/06/06 | Removed MNSA clamps on lower level instr. Nozzles  |
| 40 05050798000 | S21201MR039 | 111-1 | 07/05/06 | Fabricated instrument nozzle/root valve assemblies |
| 41 05051626000 | 027-17841   | 111-1 | 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   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 45 05051875000 | 027-17841   | 111-1 | 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   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 50 05051881000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 51 05051882000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 52 05051883000 | 027-17841   | 111-1 | 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   | 111-1 | 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   | 111-1 | 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   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 63 05051894000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 64 05051896000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 65 05051898000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 66 05051899000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 67 05051901000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 68 05051903000 | 027-17841   | 111-1 | 07/12/06 | Machined partial length heater sleeve              |

| M          | 0      | EQID             | Class | NIS-2    | Worksum  |
|------------|--------|------------------|-------|----------|--|
| 69 050519  | 04000  | 027-17841        | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 70 050519  | 05000  | 027-17841        | III-1 | 07/12/06 | Machined partial length heater sleeve              |
| 71 050519  | 06000  | 027-17841        | 111-1 | 07/12/06 | Machined partial length heater sleeve              |
| 72 050615  | 79000  | S21201ME087      | 18-1  | 07/06/06 | Performed half nozzle repairs                      |
| 73 050619  | 34000  | S21101MV001A     | 11!-1 | 07/06/06 | Replaced & modified instrument flange adapter hubs |
| 74 050619  | 75000  | S21201MU129      | III-1 | 07/06/06 | Removed/reinstalled body-to-cover seal weld        |
| 75 050700  | 80000  | S21201MU977      | III-1 | 07/06/06 | Replaced disc and plug nuts                        |
| 76 050706  | 19000  | S21208MU001      | III-2 | 07/06/06 | Removed and reinstalled body to bonnet seal weld   |
| 77 050706  | 33000  | S21208MU020      | 111-2 | 06/25/06 | Removed/reinstalled seal weld                      |
| 78 050715  | 78000  | S21201ME087      | 111-1 | 06/26/06 | Inspected existing pressurizer heaters for reuse   |
| 79 050814  | 73000  | S21201ME087      | III-1 | 02/17/06 | Remachined instrument nozzle                       |
| 80 051104  | 33000  | 027-17643-ASSY-3 | III-1 | 07/06/06 | Fabricated SG instrument half-nozzle               |
| 81 051105  | 29000  | 027-17643-ASSY-3 | III-1 | 07/06/06 | Fabricated SG instrument half-nozzle               |
| 82 051109  | 35000  | S21201ME087      | 111-1 | 02/17/06 | Cut holes in Pressurizer skirt for ventilation     |
| 83 060103  | 310000 | S21201MP003      | 111-1 | 07/05/06 | Replaced RCP seal cartridge                        |
| 84 060106  | 38001  | S21204ML036      | III-2 | 07/06/06 | Replaced pipe spool and eliminated drain valve     |
| 85 060110  | 50001  | S21201ME087      | 111-1 | 07/12/06 | Replaced flange bolting                            |
| 86 060112  | 209000 | S2RC012H057      | III-1 | 07/07/06 | Replaced snubber load stud with load pin           |
| 87 060112  | 72000  | S21901MU573      | 111-2 | 06/25/06 | Replaced check valve                               |
| 88 060112  | 277001 | S21201MU976      | 111-1 | 07/07/06 | Machined disc to correct disc to seat alignment    |
| 89 060115  | 38000  | S2ST002H002      | III-2 | 07/12/06 | Replaced snubber and load pin                      |
| 90 060117  | 790000 | 2-CS-047-033     | III-2 | 07/05/06 | Replaced flange bolting                            |
| 91 060118  | 342000 | S2VC058H004      | III-2 | 02/24/06 | Replaced snubber                                   |
| 92 060118  | 393000 | S21201MU977      | III-1 | 07/06/06 | Machined disc to correct disc to seat alignment    |
| 93 060119  | 946000 | S21208MU216      | 111-2 | 07/12/06 | Replaced valve with similar valve                  |
| 94 060121  | 10000  | 2HV9303          | III-2 | 07/05/06 | Welded set screw to retaining plate                |
| 95 060202  | 298000 | MYCAP            | 111-1 | 07/05/06 | Fabricated pressurizer heater sleeve cap           |
| 96 060203  | 365000 | S21201ME087      | 111-1 | 07/13/06 | Pressurizer weld overlay repair                    |
| 97 060203  | 366000 | S21201ME087      | 111-1 | 07/13/06 | Pressurizer weld overlay repair                    |
| 98 060203  | 367001 | S21201ME087      | 111-1 | 07/13/06 | Pressurizer weld overlay repair                    |
| 99 060203  | 368000 | S21201ME087      | III-1 | 07/13/06 | Pressurizer weld overlay repair                    |
| 100 060208 | 881000 | S21104CEDM       | 111-1 | 07/05/06 | Replaced vent stem in CEDM #56                     |
| 101 060209 | 903000 | S21201ME087      | III-1 | 07/13/06 | Pressurizer weld overlay repair                    |
| 102 060209 | 934001 | S21201MU129      | 111-1 | 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     | 111-1 | 07/12/06 | Restored packing leak-off sealweld            |
| 105 | 06021448001 | S21201MR041 | III-1 | 07/12/06 | Refurbished valve & nozzle/standpipe assembly |
| 106 | 06021452000 | S21201ME087 | 111-1 | 07/05/06 | Fabricated oversized PZR half nozzle          |
| 107 | 06030450000 | S2ST001H021 | 111-2 | 07/06/06 | Replaced snubber                              |
| 108 | 06030624000 | S21201ME087 | 10-1  | 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 | 111-2 | 07/12/06 | Replaced valve                                |
| 112 | 06040519000 | S21305MU448 | III-2 | 07/12/06 | Replaced poppet                               |
| 113 | 98041924003 | S21201MU033 | 111-2 | 07/17/06 | Replaced flange bolting                       |

<sup>\*</sup> 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.

<sup>\*</sup> 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.

<sup>\*</sup> 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 Ca<br>Address: 2244 Waln  |  |   | nia 91 <i>77</i> (                              | n   | 07/04/06  |               | Sheet                                   | 1 of 1                            |
|--|--|---|---|---|---|---------------|---|-----------------------------------|
|  | Nuclear Generating   | Station   |   | Unit:   | 'Z<br>'Replacement F  | I             | SME SECTIO<br>OATA-0252,<br>60100278-04 | IX NC                             |
| <ol> <li>Work Performed by Address: 2244 Waln</li> <li>Identification of Systems</li> <li>(a) Applicable Cons</li> </ol>                             | nut Grove Avenue, R<br>stem: Reactor Cook  | cosemead, Californ  | nia 91770                                       | Type C<br>Author<br>Expira                                  | WO: 0305005 Code Symbol S ization No: tion Date: No Addenda | tamp:         |   |                                   |
| (b) Applicable Edition   |  | ilized for Repair/R   | eplaceme  | ent Activity  | : 1995 Edition  | n, 1996       | 5 Addenda                               |                                   |
| 6. Identification of Con Name of Component   | nponents: Name of Manufacturer   | Manufacturer<br>Serial No.  | National<br>Board<br>No.                        | Other Id  | dentification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed  | ASME<br>Code<br>Stamped<br>Yes/No |
| 4" 1515# Swing Check<br>Valve  | Anchor/Darling   | E-3247-2-1  | N/A   | S21201MU  | 1976  | 1984          |   | Yes                               |
| Disc   | Anchor/Darling   | S/N 17, Ht.<br>#52950   | N/A   | Scrapped  |   | 1985          | Removed                                 | Yes                               |
| Disc   | Flowserve  | 24187-3   | N/A   | RSO-1836-   | -05   | 2005          | Installed                               | Yes                               |
| 7. Description of Worl MO 03050053 replace accordance with ASN in accordance with R minimum thicknesses created due to the many Note: Pressure Testi | ced the disc in the va<br>ME XI Data flag-02:<br>RP 060100278-04.<br>Is for the disc specificachining were PT ex | 52. MO 06011277<br>The machining wed on the drawing ramined with satisf | 7001 mac<br>as perfor<br>was maii<br>factory re | chined the n<br>med per No<br>ntained and<br>esults (ref: 2 | ew disc to con<br>te 15 of drawi<br>verified after t        | ect dis       | sc face to seat<br>23-952-26. Th        | ne                                |
| 8. Tests Conducted: Hy   | drostatic P  | <del></del>   |   | Operating Pre<br>≥2250 ps                                   | h   | Exempt        |   | er                                |

#### 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:

Supervising ASME Codes Engineer

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 11405 to 71706, 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  Kational Board, State, Province, and Endorsements  |
| Date7/7/06  |

# 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                           |
|--|-------------------------------|------------------------------|---------------------|---------------------------------------|
| Manufactured and certified by FI                               | owserve Corporation,          | 1900 S. Saunders St.,        | Raleigh, NC 2       | 7603                                  |
| Manufactured for Edison Ma                                     |                               | fusing sun societs of MEI    | Cartificate Holder) |                                       |
| •  |                               | fusing and address of brichs | 101)                |                                       |
| ocation of installation Edison                                 | Material Supply, San          | Onofre Nuclear Statio        | on, San Clemen      | te, CA 92672                          |
| Type W8421963, R/B (drawing no.)                               | SA182, F316L                  | N/A                          | N/A                 | 2005                                  |
|  |                               | (tensile strength)           | (CRN)               | (year built)                          |
| ASME Code, Section III, Division 1:                            | 1974                          | No<br>(addenda data)         | [class]             | N/A                                   |
|  |                               |                              |                     | (Code Case no.)                       |
| Fabricated in accordance with Cons                             | t. Spec. (Div. 2 only)        | (no.) Revision               | IVA                 | DateNA                                |
| Remarks: Disk for size 4 15                                    | 115# SC Valve.                |                              |                     | · · · · · · · · · · · · · · · · · · · |
| <del></del>  | <del> </del>                  | <del></del>                  | S. O. 33            | 607                                   |
| Nom. thickness (in.) N/A N                                     |                               | Per #4 Dia 10 /6 % In        |                     |                                       |
| Nom. (nickness (in.) r<br>When applicable, Certificate Holders |                               |                              |                     | igth overall (it & in.)               |
| When applicable, certificate holders                           | s para lieboura are arraction |                              | ·                   |                                       |
| Part or Appurtenance   | National<br>Board No.         | Part or A                    | purtenance          | National<br>Board No.                 |
| Serial Number  | in Numerical Order            |                              | Number              | In Numerical Order                    |
| 24187-2  | N/A                           |                              |                     |                                       |
| (1) <u>24187-2</u><br>(2) <u>24187-3</u>                       | N/A                           | (26)                         |                     |                                       |
| (2)(3)   | 13/7                          | (28)                         | 1                   | · · · · · · · · · · · · · · · · · · · |
| (4)  |                               | (29)                         |                     |                                       |
| (5)  | <del></del>                   | (30)                         |                     |                                       |
| (6)  |                               | (31)                         |                     | <del></del>                           |
| (7)  |                               | (33)                         | <del>-</del>        | <del></del>                           |
| (9)  |                               | (34)                         |                     |                                       |
| (10)   |                               | (35)                         |                     |                                       |
| (11)   |                               | (36)                         |                     | <del></del>                           |
| (12)   |                               | (37)                         |                     |                                       |
| (14)   |                               | (39)                         |                     |                                       |
| (15)   |                               | (40)                         |                     |                                       |
| (16)   |                               | {(41)                        | i                   |                                       |
| (17)   |                               | (42)                         |                     |                                       |
| (18)(19)   |                               | (44)                         |                     |                                       |
| (20)   |                               | (45)                         |                     |                                       |
| (21)   |                               | (46)                         |                     |                                       |
| (22)   |                               | (47)                         | i i                 |                                       |
| (23)   | ·                             | (48)                         |                     |                                       |
| (24)   |                               | (50)                         |                     |                                       |
| · - · <del> · · - · · · · · · · · · ·</del>                    |                               |                              |                     |                                       |
|  |                               |                              |                     |                                       |
| Design pressure 2485   | psi. Temp                     | 650 •F. Hyd                  | ro, test pressure _ | N/A at temp.                          |

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

- (7/98)

250-1836-05-10 Pg 40F10

# FORM N-2 (Back - Pg 2 of \_\_\_\_)

|  | Certificate Ho   | older's Serial Nos. 24187-2     | through  |
|--|--|---------------------------------|--|
|  | CERTIFICATION O  | F DESIGN                        |  |
| Design specifications certified by                             | (when applicable)  |                                 | Reg. no  |
| Design report* certified by                                    | (when applicable)  | P.E. State                      | Reg. no  |
|  | CERTIFICATE OF C   | OMPLIANCE                       |  |
|  | n this report are correct and that this (the ASME Code, Section III, Division    |                                 |  |
| NPT Certificate of Authorization No                            | N-1563   | Expires No                      | vember 26, 2006                                      |
| Date <u>8/25/05</u> Name                                       | Flowserve Corporation (NPT Confficeto Holder)                                    | Signedd                         | (authorized sapresentative)                          |
|  | CERTIFICATE OF I   | NSPECTION                       |  |
| I, the undersigned, holding a valid cor<br>ofNC and employed b | nmission Issued by the National Board  | of Boiler and Pressure Vessel I | nspectors and the State or Province                  |
| of Hartford CT he  | ve inspected these items described in  | this Data Report on $8-25$      | 05, and state that to the                            |
|  | Certificate Holder has fabricated these p  |                                 | dance with the ASME Code, Section                    |
|  | n authorized for stamping on the date :<br>nspector nor his employer makes any w |                                 | cancerning the equipment described                   |
|  | er the inspector nor his employer shall  |                                 |  |
| or loss of any kind arising from or cor                        | / 1/ //  | <i></i>                         |  |
| Date 8-25-05 Signed -  | JA-M. Jack<br>[Authorized Nuclear Inspector)                                     | Commissions NC 14.              | 2/<br>nci. 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   | Date: 09/22/05           | Sheet 1 of 1                 |
|----|---|--------------------------|------------------------------|
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770   | Unit: 2                  |                              |
| 2. | Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128          | Repair/Replacement Plan: | ASME SECTION XI<br>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                          |
|    | Addiess. 2244 Walliat Glove Avenue, Rosellicau, Catholina 31770   | Authorization No:        | N/A                          |
| 4. | Identification of System: Chemical and Volume Control   | Expiration Date:         | N/A                          |

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda (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<br>Serial No. | National<br>Board<br>No. | Other Identification                   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------|-----------------------|----------------------------|--------------------------|--|---------------|--|-----------------------------------|
| 2" 699# Globe (Drag<br>Valve) | Control<br>Components | 36995-1-2                  | N/A                      | 2PV0201B                               | 1984          |  | Yes                               |
| Spindle                       | Control<br>Components | 635339, Ht. #289D          | N/A                      | RSO-2551-03, SB637<br>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.

| . Tests Conducted: | Hydrostatic      | Pneumatic | Nominal Operating Pressure | X Exempt       | Other |
|--------------------|------------------|-----------|----------------------------|----------------|-------|
|                    | See: AR 04110114 | <u> </u>  | Pressure: ≥305 psi         | Test Temp: N/A | °F    |

| Q  | Rem  | arks:   | No  | ne  |
|----|------|---------|-----|-----|
| 7. | LCII | ıaı nə. | 110 | uc. |

| (Applicable Manufacturer's Data Reports to be attached)  CERTIFICATE OF COMPLIANCE   |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
| Type Code Symbol Stamp: N/A  |  |  |  |  |
| Certificate of Authorizaton No: N/A Expiration Date: N/A   |  |  |  |  |
| Signed: Supervising ASME Codes Engineer Date: 9/22/05 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 6/1/04 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.  Commissions  Inspector's Signature  Commissions  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 Ca<br>Address: 2244 Waln   |   |                            | ia 91770                 | Date: 06/22/0                | 6                   | Shee                                     | t 1 of 1                          |
|---|---|----------------------------|--------------------------|------------------------------|---------------------|--|-----------------------------------|
| 2. Plant: San Onofre<br>Address: P.O. Box 1   | Nuclear Generating<br>28, San Clemente, C |                            | 0128                     | Unit: 2 Repair/Replace       | I                   | ASME SECTI<br>DATA-0244,<br>031200265-03 |                                   |
| <ul><li>3. Work Performed by:<br/>Address: 2244 Waln</li><li>4. Identification of Sys</li><li>5. (a) Applicable Const</li></ul> | aut Grove Avenue, R                       | osemead, Californ          | nia 9177                 | Expiration Dat               | mbol Stamp:<br>No:  | N/A<br>N/A<br>N/A                        |                                   |
| (b) Applicable Edition  |   | lized for Repair/R         | eplacem                  | ent Activity: 1995           | Edition, 1990       | 6 Addenda                                |                                   |
| 6. Identification of Cor  Name of Component   | nponents: Name of Manufacturer            | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identificati           | on Year<br>Built    | Corrected,<br>Removed, or<br>Installed   | ASME<br>Code<br>Stamped<br>Yes/No |
| 2" 1500# Stainless<br>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<br>Replaced the disc in a<br>XI Data flag-0244. N<br>031200265-03 and w                                  | the valve in plant lo<br>MO 05070619 remo | ved and reinstalled        |                          |                              |                     |  |                                   |
|   |   |                            |                          |                              |                     |  |                                   |
|   |   |                            |                          |                              |                     |  |                                   |
| 8. Tests Conducted: Hyo   | drostatic Pi                              | <del></del> -              |                          | perating Pressure  ≥ 312 psi | X Exempt Test Temp: |  | er                                |

## FORM NIS-2 (back)

| (Applicable Mani  | ufacturer's Data Reports to be attached)   |
|---|--|
| CERTIF  | ICATE OF COMPLIANCE  |
| I certify that the statements made in the report are Code, Section XI.  | correct and that this conforms to the requirements of the ASME   |
| 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: 7/5/06   |
| CERTIFICA   | ATE OF INSERVICE INSPECTION  |
| the State or Province of <u>California</u> , and employ described in this Owner's Report during the period the best of my knowledge and belief, the Owner this Owner's Report in accordance with the requirement. | has performed examinations and taken corrective measures described in  |
| the examinations and corrective measures described employer shall be liable in any manner for any personnected with this inspection.  | bed in this Owner's Report. Furthermore, neither the Inspector nor his ersonal injury or property damage or a loss of any kind arising from or Commissions  1574-California  National Board, State, Province, and Endorsements |
| Date 7/6/06   |  |

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\* //of 20

|  | As required by the Provi  | isions of the ASME Code Rules  | Sht. 1 of 2  |
|--|---|--|--|
| 1. (a) Manufactured by   |   | ng Corp., Pittsburgh, PA   | (NU-92099)   |
| (b) Manufactured for_  | •   | Edison Company, San Clemen   |  |
| •  | (Name and address   | sa of Manufacturer of completed nuclear con  | _  |
| 2. Identification-Manufac  | turer's Serial No. of PartNAO   | 24-ABY-1 Nat'l Bd. No  | N/A  |
|  |   | -(1)Z <sub>Drawing</sub> Prepared by Kero  |  |
| (b) Description of Par   | tt Inspected 1-1/2  | 2" Stem/Disc Assembly  |  |
|  |   | Sum., Addenda date <u>1973</u> , Case No   |  |
| 3. Remarks: Spare  | Parts for Nuclear Valve   | S<br>service for which component was designed)   | ······································   |
| 2 Shee   | ets - (N-2 and Supplemen  |  |  |
|  |   |  |  |
|  |   | · · · · · · · · · · · · · · · · · · ·  |  |
|  |   |  |  |
| forms to the rules of cons<br>The applicable Design S<br>Manufacturer is responsit<br>in the component Design S<br>Date February 24, | truction of the ASME Code Section I<br>Specification and Stress Report are<br>ole for furnishing a separate Design<br>Specification and Stress Report.)  19 84 Signed Kerotest (Manual Code Section 1 | ect and this vessel part or appurtenance of the responsibility of the part M. Specification and Stress Report if the Mfg. Corp. By Cartestant of Authorization Certificate of Authorization  | anufacturer. An appurtenance appurtenance is not included  |
|  |   | R APPURTENANCE (when applications of the control of | able)  |
| Design information on l  | file at   |  |  |
| Stress analysis report   | on file at  |  |  |
| Design specifications  | certified by  | Prof. Eng. State   | Reg. No  |
| Stress analysis report   | certified by  | Prof. Fng. State_  | Reg. No  |
|  | CERTIFICATE (   | OF SHOP INSPECTION   |  |
| and/or the State or Pro of Hartford, Co Manufacturer's Partial and belief, the Manufac By signing this cer ing the part described    | vince of Pennsylvania are onnecticut  Data Report on 277 between the seconstructed this part in a stificate, neither the Inspector nor his in this Manufacturer's Partial Da                          | by the National Board of Boiler and Produced by The Hartford are inspected the part of a pressure 19, and state that to ecordance with the ASME Code Section is employer makes any warranty, express a Report. Furthermore, neither the property damage or a loss of any kind  | Steam Boiler I&I Co.  vessel described in this the best of my knowledge n III.  essed or implied, concern- nspector nor his employer |
| mulae  | R Gantel co   | mmissions PA2/87   | te Province and No.  |

<sup>\*</sup>Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½' 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".

enterest and supplied the state of the section of

### SUPPLEMENT SHEET FORM N-2

| 1. | (A)  | MANUFACTURED BY:                      | Kerotest Man    | ufacturi | ng Corp.   |                                       | NU-92                                 | 2099         |               |
|----|------|---------------------------------------|-----------------|----------|--|---------------------------------------|---------------------------------------|--------------|---------------|
|    | (B)  | MANUFACTURED FOR:                     | Southern Cal    | ifornia  | Edison Com   | pany                                  |                                       |              | <del>-</del>  |
| 2. | IDEN | TIFICATION -                          | ,               |          |  |                                       |                                       |              |               |
|    | (A)  | DRAWING NO.: 22                       | 516-99R-(1)Z    |          | DRAWING P  | REPARED BY:                           | Kerotest                              | M6g.         | Солр          |
|    |      | DESCRIPTION - SIZE                    |                 | Stem/Di  |  |                                       |                                       |              |               |
|    | (C)  |                                       |                 |          |  | ,                                     |                                       |              |               |
|    |      | EDITION 1971                          | ADDENDA DATE    | Sum. 19' | <sup>73</sup> , case n   | 0N/A                                  | _, class                              | 1            |               |
|    |      | SERIAL NUN                            |                 |          |  | SERIAL I                              |                                       |              |               |
| 2. | NA   | 4024-ABY-2                            |                 | 14.      |  |                                       |                                       |              |               |
| 3. | 7    |                                       | ·               | 15.      |  | ·                                     |                                       |              |               |
| 4. |      |                                       |                 | 16.      |  |                                       |                                       |              |               |
| 5. |      |                                       |                 | 17.      |  |                                       | ····                                  |              |               |
| 6. | ~    |                                       |                 | 18.      | ····   |                                       | <del></del>                           |              |               |
| 7. |      |                                       |                 | 19.      |  | $\overline{}$                         | <del> </del>                          |              |               |
| 8. |      |                                       | <del> </del>    | 20.      |  |                                       | <u> </u>                              |              |               |
| ۶. |      |                                       | <u> </u>        | 21.      |  | · · · · · · · · · · · · · · · · · · · | $\overline{}$                         |              |               |
| 0. |      | <del></del>                           |                 | 22.      |  | <del></del>                           | $\overline{}$                         |              |               |
| 1. |      |                                       | $\overline{}$   | 23.      |  |                                       |                                       | <del>\</del> |               |
| 2. |      | · · · · · · · · · · · · · · · · · · · | <del></del>     | 24.      |  |                                       | <del></del>                           |              | <del>/-</del> |
| 3. |      |                                       |                 | 25.      |  |                                       | · · · · · · · · · · · · · · · · · · · |              |               |
| 3. | REMA | RKS: <u>Spare Parts fo</u>            | or Nuclear Valv | <u> </u> |  |                                       | ·                                     |              |               |
|    |      | 2 Sheets (N-2                         | and Supplement  | ]        |  |                                       | · · · · · · · · · · · · · · · · · · · | <del></del>  | <del></del>   |
|    | SIGN | IED: Kerotest Manufi                  | inturing Carn   | BY:      | And I  | ) t                                   | DATE:                                 | 2/24         | /8 <u>1</u>   |
|    | אטוכ | <del></del>                           |                 | By:      | with the same of t |                                       | DATE:                                 | -/           |               |
|    |      | <u>Authorized Nucl</u>                | tear inspector  | Dy :     |  |                                       | vale:                                 |              | <u> </u>      |

As Required by the Provisions of the ASME Code Section XI

| 1. | Owner: Southern California Edison Company  | Date: 06/14/06          | Sheet 1 of 1                                 |
|----|--|-------------------------|--|
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Unit: 2                 |  |
| 2. | Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128 |                         | ASME SECTION XI<br>DATA-0244,<br>031200267-3 |
| ^  | THE A. D. Courseller Courts of City of P. P. Course  | MO/CWO: 03120413000     | 05070633000                                  |
| ٤. | Work Performed by: Southern California Edison Company  | Type Code Symbol Stamp: | N/A  |
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Authorization No:       | N/A  |
| 4. | Identification of System: Chemical and Volume Control  | Expiration Date:        | N/A  |

5. (a) Applicable Construction Code: ASME Section III, Class 2, 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<br>Serial No. | National<br>Board<br>No. | Other Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|--|------------------------|----------------------------|--------------------------|------------------------|---------------|--|-----------------------------------|
| 2" 1500# Stainless<br>Packed Y-Type Globe<br>Valve | Kerotest               | AFE5-18                    | N/A                      | S21208MU020            | 1984          | Corrected                              | Yes                               |
| Disc   | BW/IP<br>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. 7  | Tests Conducted: | Hydrostatic |         | Pneumatic | Nominal Operating  | g Pressure | X      | Exempt    | Other |   |
|-------|------------------|-------------|---------|-----------|--|------------|--------|-----------|-------|---|
|       |                  | See: AR 0   | 3120026 | 57-04     | Pressure: ≥312   | psi        | Test ' | Temp: N/A | °F    | _ |
| Note: |                  |             |         |           | ded (1) size is 8 1/2 in. x 11 i<br>of this form, and (4) each she |            |        |           |       |   |

| · ••   | able Manufacturer's Data Reports to be attached)   |  |
|--|--|--|
| CE   | RTIFICATE OF COMPLIANCE  | Andrew Comment of the |
| I certify that the statements made in the repo<br>Code, Section XI.  | ort are correct and that this conforms to the re   | equirements of the ASME  |
| Type Code Symbol Stamp: N/A  | And the second second  |  |
| Certificate of Authorizaton No: N/A  | Expiration Date: N/A   | ·<br>·   |
| Signed:  | Supervising ASME Codes Engineer  | Date: <u>6/22/66</u>   |
|  | IFICATE OF INSERVICE INSPECTION  |  |
| the State or Province of <u>California</u> , and en described in this Owner's Report during the the best of my knowledge and belief, the O   | ion issued by the National Board of Boiler a imployed by HSBCT of Hartford, Connection period 9/7/05 to 66 where has performed examinations and taken requirements of the ASME Code, Section X | cut have inspected the components of the compone |
| this Owner's Report in accordance with the   | - <del>-</del>   |  |
| By signing this certificate, neither the Inspetthe examinations and corrective measures of   | ector nor his employer makes any warranty,<br>described in this Owner's Report. Furthermo<br>any personal injury or property damage or a   | ore, neither the Inspector nor his   |
| By signing this certificate, neither the Inspet<br>the examinations and corrective measures of<br>employer shall be liable in any manner for | described in this Owner's Report. Furthermoany personal injury or property damage or a  Commissions  | ore, neither the Inspector nor his   |

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

| RSO-0518-48                              | ed by the Provisions of the ASME Code, Section III  Not To Exceed One Day's Production | Pg1_ of _2              |
|--|--|-------------------------|
| 1. Manufactured and certified by Kerotes | t Mfg. Corp., 2525 Liberty Ave., Pgh, Pa   | a 15222 (C200387)       |
| 2 Manufactured for RW/IP Internati       | onal. Inc. Pump Div. Los Angeles Operat  | ions 2300 E. Vernon Ave |

3. Location of installation BW/IP International Inc. Pump Div.Los Angeles Operations 2300 E.Vernon Ave.

4. Type 22516-99R Rev. C SA479, 316 75,000 PSI N/A 1993

Idrawing no.I Immit some no.I Itemate strength ICRNI IYear burt

5. ASME Code, Section III: 1989\* No I N/A

5. ASME Code, Section III: 1989× ND 1 Incidents date) (case) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A

7. Remarks: RW/TP 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:

| i.                   | 1                  | 1                    | •                                      |
|----------------------|--------------------|----------------------|--|
| Part or Appurtenance | National           | Part or Appurtenance | National                               |
| Serial Number        | Board No.          | Serial Number        | Board Number                           |
|                      | in Numerical Order |                      | in Numerical Order                     |
|                      |                    | 1                    |  |
| JSY7/ARZ-2.          | N/A                | (26)                 |  |
| JSY11/ARZ-1          | N/A                | (27)                 | ·                                      |
| 3) JSY11/ARZ-2       | N/A                | (28)                 | —————————————————————————————————————— |
| JSY11/ARZ-3          | N/A                | (29)                 |  |
| JSY11/ARZ-4/         | A/K                | [30]                 |  |
| JSY11/ARZ-5          | N/A                | (31)                 | · /:                                   |
| JSY11/ARZ-6          | N/A                | (32)                 |  |
| J5Y11/ARZ-7 /        | N/A                | (33)                 |  |
| JSY11/ARZ-8          | N/A                | 1,00,000             |  |
| JSY11/ARZ-9          | N/A                | (34)                 | •/                                     |
| JSY11/ARZ-10/        | N/A                | (36)                 | <del></del>                            |
| JSY11/ARZ-11         | N/A                | (37)                 |  |
| JSY11/ARZ-12         | N/A                | (38)                 | V                                      |
| JSY11/ARZ-13         | N/A                | (39)                 | <u> </u>                               |
| JSY11/ARZ-14         | N/A                | (40)                 |  |
| JSY11/ARZ-15         | N/A                | (41)                 |  |
| JSY11/ARZ-16         | N/A                | [42]                 |  |
| , 1                  |                    | (43)                 |  |
|                      |                    | (44)                 | . \                                    |
|                      |                    | (45)                 |  |
|                      |                    | (46)                 |  |
| 1                    |                    | (47)                 |  |
| 1                    |                    | [48]                 | . \                                    |
|                      |                    | (49)                 |  |
| ,                    |                    | (50)                 |  |
|                      |                    | [130]                |  |

<sup>\*</sup>Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ × 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.

- Mir. Serial No. see below

|  |   | Will. Schling.   |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|
|  | CERTIFICATION OF DESIGN                   |  |  |  |  |  |  |  |  |  |
| Design specifications certified by   | N/A                                       | P.E. State N/A Reg. no. N/A  |  |  |  |  |  |  |  |  |
| Design report* certified by  |   | P.E. State N/A Reg. no. N/A  |  |  |  |  |  |  |  |  |
| CERTIFICATE OF SHOP COMPLIANCE   |   |  |  |  |  |  |  |  |  |  |
| We certify that the statements made in this report are correct and that the (these) STEM DISC ASSEMBLY conforms to the rules of construction of the ASME Code, Section III.  |   |  |  |  |  |  |  |  |  |  |
| NPT Certificate of Authorization No  |   | Expires 4-25-95  |  |  |  |  |  |  |  |  |
| Date 11/22/93 Name Kero  | test Manufacturing Corp.                  | Signed Julian Benesalecti [authorited representative]  |  |  |  |  |  |  |  |  |
| • •  | CERTIFICATE OF SHOP II                    | VSPECTION  |  |  |  |  |  |  |  |  |
| ), the undersigned, holding a valid commerce Pennsylvania and employed   | nission issued by the National Board of B | oiler and Pressure Vessel Inspectors and the State or Province of  |  |  |  |  |  |  |  |  |
| 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 Idl 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.     | no or opportunition of adoption that are a man and a man |  |  |  |  |  |  |  |  |
|  |   | ranty, expressed or implied, concerning the equipment described  |  |  |  |  |  |  |  |  |
| In this Data Report. Furthermore, neither  | the inspector nor his employer shall be i | iable in any manner for any personal injury or property damage or  |  |  |  |  |  |  |  |  |
| base of any kind arising from or connecte  Date 11-23-93 Signed  | ed with this inspection.                  | Commissions PA 23 84 N  [Net'l Bd. linet, and presenting state or prov. and no.]   |  |  |  |  |  |  |  |  |
| •  |   | Here & cost briog distribution and a second  |  |  |  |  |  |  |  |  |

Part or Appurtenance Serial Number

| (1)_  | JSY7/ARZ-2      |
|-------|-----------------|
| (2)_  | JSY11/ARZ-1     |
| (3)   | JSY11/ARZ-2     |
| (4)   | JSYll/ARZ-3     |
| (5)_  | " JSY11/ARZ-4 / |
| (6)_  | JSYll/ARZ-5     |
| (7)   | JSYll/ARZ-6     |
| (8)   | 70V11/AD7-7     |
| . (9) | JSY11/ARZ-8     |
| 101_  | 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    |
|       |                 |

Management Control of the State 
As Required by the Provisions of the ASME Code Section XI

| 1. | Owner: Southern California Edison Company  | Date: 08/03/05                                    | Sheet 1 of 1                  |
|----|--|---|-------------------------------|
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Unit: 2   |                               |
| 2. | Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128             | Repair/Replacement Plan: ASME<br>DATA             | SECTION XI<br>1-0480, GEN-239 |
| _  |  | MO/CWO: 03121523000                               |                               |
| 3. | Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 | Type Code Symbol Stamp: N/A Authorization No: N/A |                               |
| 4. | Identification of System: Safety Injection and Shutdown Cooling  | Expiration Date: N/A                              |                               |

5. (a) Applicable Construction Code: ASME Section III, Class 2, 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<br>Serial No.                      | National<br>Board<br>No. | Other Identification                    | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|---|---------------------------|---|--------------------------|---|---------------|--|-----------------------------------|
| 2" NPS, 300# Flanged<br>Piping Connection | Bechtel                   | Ht. #93570 &<br>A1257 (ref trav.<br>SO2-112-84) | N/A                      | S21204ML051; Spool<br>Piece 2-SI-051-2C | 1985          | Соггестед                              | 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                              | Nó                                |
| 5/8"-11 Nuts (5 ea.)                      | Vitco Nuclear<br>Products | Ht. #5483089, Tr.<br>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.

| 0                   |  |                     |   |
|---------------------|--|---------------------|---|
| 8. Tests Conducted: | Hydrostatic Pneumatic See: AR 031201142-03 | Pressure: ≥ 600 psi | X Exempt Other  Test Temp: N/A F  |
|                     |  |                     | ntion in Items 1 through 6 on this report is included on each and dated by the Owner or Owner's designee and the A1A. |

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 Manuflacturer 2 Data Kebotts to be attached)  |
|---|
| CERTIFICATE OF COMPLIANCE   |
| l 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: 8/19/05 Owner or Owner's Designee, Title  |
|   |
| I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>13/39/04</u> to <u>8/22/05</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  Commissions  Inspector's Signature  Commissions  National Board, State, Province, and Endorsements  |
| Date 7/5/06  Originally signed by C.D. Thompson on 8/22/05 Added A/R #  |

As Required by the Provisions of the ASME Code Section XI

| <ol> <li>Owner: Southern California E</li> </ol> | dison Compa | anv |
|--|-------------|-----|
|--|-------------|-----|

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

Date: 02/13/06

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: 031200045-06

3. Work Performed by: Southern California Edison Company

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

MO/CWO: 04010830001

Type Code Symbol Stamp: N/A Authorization No:

N/A

4. Identification of System: Chemical and Volume Control

Expiration Date:

N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda and Design Specification DS-1208.

(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<br>Serial No.    | National<br>Board<br>No. | Other Identification                      | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|---------------------------------|--------------------------|-------------------------------|--------------------------|---|---------------|--|-----------------------------------|
| 1-1/2" 2500# Blind<br>Flange    | Ideal Forging            | N/A                           | N/A                      | S21208ML059                               | N/A           | Corrected                              | No                                |
| 1-1/8" x 36" All-Thread<br>Stud | Nova Machine<br>Products | Ht. #8867312, Ht.<br>Code K2Q | N/A                      | RSO-1710-93, SA193 B7                     | N/A           | Installed                              | No                                |
| 1-1/8"-7 Heavy Hex Nut<br>(8)   | Mackson, Inc             | Ht. #34965, Trace<br>#S325    | N/A                      | RSO-2390-03, SA194 Gr.<br>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     | X    | Exempt    | Other |  |
|---------------------|-------------|---------|-------------|---|--------------------------------|------|-----------|-------|--|
|                     | See: AR 03  | 1200045 | <u>5-07</u> |   | Pressure: <u>&gt;=2325</u> psi | Test | Temp: N/A | °F    |  |

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)

| Cortificate of Authorizaton No: N/A  Signed:  Supervising ASME Codes Engineer  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 10-25-2006 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              |  |
|---|--|
| Cortificate of Authorizaton No: N/A  Signed:  Supervising ASME Codes Engineer  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 10-25-2006 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              | CERTIFICATE OF COMPLIANCE  |
| Cortificate of Authorizaton No: N/A  Signed:  Supervising ASME Codes Engineer  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 10-25-2006 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              | Code, Section XI.  Type Code Symbol Stamp: N/A  Certificate of Authorizaton No: N/A  Signed: Supervising ASME Codes Engineer Date: 2 · /3 - OG  Owner or Owner's Designee, Title  CERTIFICATE OF INSERVICE INSPECTION  |
| Certificate of Authorizaton No: N/A  Signed: Supervising ASME Codes Engineer Date: 2.13-CG  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 10-25-2005 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 | I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME  |
| Certificate of Authorizaton No: N/A  Signed:  Supervising ASME Codes Engineer  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 10-05-2006 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              | Code, Section XI.  |
| Certificate of Authorizaton No: N/A  Signed:  Supervising ASME Codes Engineer  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 10-05-2006 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              |  |
| 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 10-25-2006 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                                     | Type Code Symbol Stamp: 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 10-25-2006 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                                     |  |
| 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 10-25-2006 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                                     | Certificate of Authorizaton No. 28/A  Evaluation Date: N/A   |
| 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 10-05-2006 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   | Expiration Date. WA  |
| 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 10-05-2006 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   |  |
| 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 10-05-2006 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   | a land with a single of the party of the same of the s |
| I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>10-25-2006</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning   |  |
| I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>10-25-2006</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning   | Owner's Designee, Title  |
| I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>10-25-2006</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning   |  |
| the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>10-05-2006</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning   | CERTIFICATE OF INSERVICE INSPECTION  |
| the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>10-05-2006</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning   |  |
| described in this Owner's Report during the period 10-25-2006 to 2-11-2006, 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 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 State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the component   |
| 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   |  |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning  |  |
|   | this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  |
|   |  |
|   |  |
| 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 hits inspection  |  |

Commissions 4024, N, NS, T California 1862
National Board, State, Province, and Endorsements

| 1. Owner: Southern Ca<br>Address: 2244 Waln   | Date: 07/0 Unit: 2   | 5/06  |                          | Shee   | 1 1 of 1   |                |  |                                   |  |
|---|----------------------|---|--------------------------|--|------------|----------------|--|-----------------------------------|--|
| 2. Plant: San Onofre<br>Address: P.O. Box 1   |                      |   |                          | Repair/Replacement Plan: ASME SECTION XI DATA-0164, 040302409-08 |            |                |  |                                   |  |
|   |                      |   | MO/CWO:                  | 04032477   | 7000 0     | 6021161000     |  |                                   |  |
| 3. Work Performed by:<br>Address: 2244 Waln   | Authorizati          | Type Code Symbol Stamp: N/A Authorization No: N/A |                          |  |            |                |  |                                   |  |
| 4. Identification of System: Safety Injection and Shutdown Cooling Expiration Date: N/A   |                      |   |                          |  |            |                |  |                                   |  |
| 5. (a) Applicable Const   | ruction Code: ASN    | ME Section III, Cla                               | ss 1(NB)                 | ), 1974 Ed, Sum  | mer 1975 / | <u>4dd., (</u> | Code Case 17                           | <u>81</u>                         |  |
| (b) Applicable Edition  | on of Section XI Uti | lized for Repair/Re                               | eplaceme                 | ent Activity: 19   | 95 Edition | <u>, 1996</u>  | Addenda                                |                                   |  |
| 6. Identification of Con  | nponents:            |   |                          |  |            |                | _                                      |                                   |  |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No.                        | National<br>Board<br>No. | Other Identifi   | cation     | Year<br>Built  | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| 12" 1500# POW-R-<br>SEAL Gate Valve   | WKM                  | 495469  | 1694                     | 2HV9350  |            | 1979           | Corrected                              | Yes                               |  |
| Gate and Segment  | Cooper Industries    | 94-177  | N/A                      | RSO-0131-95, S<br>CA6NM  | SA487      | 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: Hyd   | drostatic P          |   |                          | operating Pressure ≥ 2250 psi                                    |            |                |  | er :                              |  |

9. Remarks: None.

| (Applicable Manufacturer's Data Report | ts 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 Supervising ASME Codes Engineer Date: Signed: 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 11/12/165 to 7/12/0, 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. California Commissions National Board, State, Province, and Endorsements

| 1. Owner: Southern C   |                        |   | io 0177                  |                      | 07/04/06   |                  | Sheet                                  | 1 of 1                            |
|--|------------------------|---|--------------------------|----------------------|--|------------------|--|-----------------------------------|
| <ul> <li>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Plant: San Onofre Nuclear Generating Station<br/>Address: P.O. Box 128, San Clemente, California 92674-0128</li> </ul> |                        |   |                          |                      | Unit: 2 Repair/Replacement Plan: ASME SECTION XI DATA-0388 |                  |  | IX NC                             |
| <ul><li>3. Work Performed by:<br/>Address: 2244 Waln</li><li>4. Identification of Sys</li></ul>  | Type (                 | MO/CWO: 04041167000  Type Code Symbol Stamp: N/A Authorization No: N/A Expiration Date: N/A |                          |                      |  |                  |  |                                   |
| 5. (a) Applicable Cons   |                        |   | ss 2, 197                | 4 Edition,           | Summer 1974 .  | Adden            | da.                                    |                                   |
| <ul><li>(b) Applicable Edition</li><li>6. Identification of Contract</li></ul>   | ••                     | ilized for Repair/R   | eplaceme                 | ent Activity         | y: <u>1995 Editio</u>                                      | n <u>, 199</u> 6 | 5 Addenda                              |                                   |
| Name of Component  | Name of Manufacturer   | Manufacturer<br>Serial No.  | National<br>Board<br>No. | Other 1              | Identification .   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 1-1/2" X 2-1/2" Nozzle<br>Type Relief Valve  | Crosby Valve &<br>Gage | N59377-00-0002  | N/A                      | 2PSV9206<br>on MO 06 | o (to be rebuilt<br>031830)                                | 1978             | Removed                                | Yes                               |
| 1-1/2" X 2-1/2" Nozzle<br>Type Relief Valve  | Crosby Valve &<br>Gage | N59377-00-0005  | N/A                      | RSO-0757<br>98021343 |  | 1984             | Installed                              | Yes                               |
| 7. Description of Work Replaced the relief v   |                        | n 2PSV9206 with a   | a rebuilt                | and tested           | spare valve.   |                  |  |                                   |
|  |                        |   |                          |                      |  |                  |  |                                   |
| ·  |                        |   |                          |                      |  |                  |  |                                   |
|  |                        |   |                          |                      |  |                  |  |                                   |
|  |                        |   |                          |                      |  |                  |  |                                   |
| 8. Tests Conducted: Hy   |                        |   |                          |                      |  | Exempt           |  | er 📋                              |
| Se   | e: AR 040400825-0      | <u>12</u> Pr  | ressure:                 | ≥312 p               | si Test Te   | emp: 1           | N/A °F                                 |                                   |

9. Remarks: None.

|                                | (Applicable Manufacturer's Data Reports to be attached)   |
|--------------------------------|---|
|                                | CERTIFICATE OF COMPLIANCE   |
| •                              | y that the statements made in the report are correct and that this conforms to the requirements of the ASME Section XI.   |
| Туре С                         | ode Symbol Stamp: N/A   |
| Certific                       | cate of Authorizaton No: N/A Expiration Date: N/A   |
| Signed                         | Supervising ASME Codes Engineer Date: 7806 Owner or Owner's Designee, Title   |
|                                | CERTIFICATE OF INSERVICE INSPECTION   |
| the Sta<br>describ<br>the best | undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford, Connecticut</u> have inspected the component ed in this Owner's Report during the period 112105 to 71600, and state that to to fmy knowledge and belief, the Owner has performed examinations and taken corrective measures described in wher's Report in accordance with the requirements of the ASME Code, Section XI. |
| the exa                        | ning this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning aminations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his ver shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or cted with this inspection.  Commissions  Commissions  |
| 1                              | Commissions 15/4 California N4 L<br>National Board, State, Province, and Endorsements   |
| Date                           | 7/12/04   |

| 1. Owner: Southern C<br>Address: 2244 Walt                 | Date: 07/16/0   | 4                           | Sheet 1 of 1   |                                  |                  |  |                                   |  |  |  |
|--|---|-----------------------------|--|----------------------------------|------------------|--|-----------------------------------|--|--|--|
| 2. Plant: San Onofre Address: P.O. Box                     | Nuclear Generating  | Unit: 2                     | Unit: 2  Repair/Replacement Plan: ASME SECTION XI  DATA-0274 |                                  |                  |  |                                   |  |  |  |
|  | ,   | MO/CWO: 04                  |  |                                  |                  |  |                                   |  |  |  |
| <ol><li>Work Performed by<br/>Address: 2244 Walı</li></ol> |   | Type Code Syn Authorization |  | N/A<br>N/A                       |                  |  |                                   |  |  |  |
| 4. Identification of Sy                                    | 4. Identification of System: Chemical and Volume Control Expiration Date: N/A |                             |  |                                  |                  |  |                                   |  |  |  |
| 5. (a) Applicable Cons                                     | truction Code: ASN  | ME Section III, Cla         | ss 2, 197  | 1 Edition, Summe                 | r 1973 Adden     | da; Code Caso                          | e: None                           |  |  |  |
| (b) Applicable Editi                                       | on of Section XI Uti  | ilized for Repair/Re        | eplaceme   | ent Activity: 1995               | Edition, 1996    | 5 Addenda                              |                                   |  |  |  |
| 6. Identification of Co                                    | mponents:   |                             |  |                                  |                  |  |                                   |  |  |  |
| Name of Component  | Name of Manufacturer  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                                     | Other Identificati               | on Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |  |  |
| 1 1/4" 600# Y-Type<br>Globe Valve                          | Kerotest  | KP17-25                     | N/A  | S21208MU054                      | 1977             |  | Yes                               |  |  |  |
| Disc   | Flowserve   | S/N 12, Ht. #8546J          | N/A  | RSO-1429-00, SA4<br>316/Stellite | 79 2000          | Replacement                            | Yes                               |  |  |  |
| 7. Description of Wor                                      | . <del>1 </del>   | <u> </u>                    | <u> </u>   | <del></del>                      |                  | <u> </u>                               | (ا                                |  |  |  |
| Replaced the disc in disc.                                 |   | plant position S21          | 208MU0   | 54 (valve s/n KP1                | 7-25) with an    | in-kind replac                         | ement                             |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  | •                |  |                                   |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  | •                |  |                                   |  |  |  |
|  | ·   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
|  |   |                             |  |                                  |                  |  |                                   |  |  |  |
| 8. Tests Conducted: Hy                                     | ydrostatic P  | neumatic N                  | Iominal C  | perating Pressure                | X Exempt         | Otho                                   | er 📋                              |  |  |  |
|  | e: AR 040500017-0   |                             |  |                                  | Test Temp: 1     | _                                      | ··= ·                             |  |  |  |

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: Supervising ASME Codes Engineer Date: 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 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. Commissions Inspector's Signature National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code Section  $\boldsymbol{X}\boldsymbol{I}$ 

| 1. Owner: Southern Ca<br>Address: 2244 Waln                    | Date: 07/05/06                            |                            | Sheet 1 of 1   |                            |                  |  |                                   |
|--|---|----------------------------|--|----------------------------|------------------|--|-----------------------------------|
| 2. Plant: San Onofre<br>Address: P.O. Box 1                    | Nuclear Generating<br>28, San Clemente, C |                            | Unit: 2 Repair/Replacement Plan: ASME SECTION XI DATA-0068 |                            |                  |  |                                   |
| o W. I. n. f Il  | . C                                       |                            |  | MO/CWO: 0406007            | 4000             |  |                                   |
| 3. Work Performed by:<br>Address: 2244 Waln                    |   |                            |  | Audiorization No.          | _ 1              | N/A                                    |                                   |
| 4. Identification of Sys                                       | stem: Chemical and                        | Volume Control             |  | Expiration Date:           | ,                | N/A                                    |                                   |
| 5. (a) Applicable Cons   | truction Code: ASN                        | IE Section III, Clas       | ss 2, 197  | 1 Edition, Summer 1973     | Adden            | da.                                    |                                   |
| (b) Applicable Editi   | on of Section XI Uti                      | lized for Repair/Re        | eplaceme   | ent Activity: 1995 Edition | ı <u>, 199</u> 6 | 6 Addenda                              |                                   |
| 6. Identification of Con                                       | mponents:                                 |                            |  |                            |                  |  |                                   |
| Name of Component  | Name of Manufacturer                      | Manufacturer<br>Serial No. | National<br>Board<br>No.                                   | Other Identification       | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 2" 1500# Y-Type Globe<br>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 Worl Replaced the disc an ASME XI Data flag- | d bonnet on the valv                      | e in plant location        | S212081  | MU070 with in-kind repla   | cemen            | ts in accordan                         | ce with                           |
|  |   |                            |  |                            |                  |  |                                   |
| 8. Tests Conducted: Hy   | <del></del>                               |                            |  |                            | Exempt           | · · ·                                  | er 🔲                              |
| <u>Se</u>  | e: AR 040501779-0                         | <u>12</u> Pr               | essure:  | ≥2325 psi Test T           | emp: 1           | N/A F                                  |                                   |

| <ol> <li>Remarks: The replacement disc and replacement bonnet were certified to a higher c<br/>by ASME III paragraph NCA-2134.</li> </ol>  | ode class ASME III-1 as allowed  |
|--|--|
| (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 Code, Section XI.   | requirements of the ASME   |
| Type Code Symbol Stamp: N/A  |  |
| Certificate of Authorizaton No: N/A Expiration Date: N/  | /A   |
| Signed: Supervising ASME Codes Engineer Owner or Owner's Designee, Title   | er Date: <u> </u>  |
| CERTIFICATE OF INSERVICE INSPECTION  |  |
| I, the undersigned holding a valid commission issued by the National Board of Boiler the State or Province of California, and employed by HSBCT of Hartford, Connect described in this Owner's Report during the period 1/4/05 to 7/1 the best of my knowledge and belief, the Owner has performed examinations and take this Owner's Report in accordance with the requirements of the ASME Code, Section By signing this certificate, neither the Inspector nor his employer makes any warranty the examinations and corrective measures described in this Owner's Report. Furthern employer shall be liable in any manner for any personal injury or property damage or | eticut have inspected the components block, and state that to en corrective measures described in XI.  y, expressed or implied, concerning more, neither the Inspector nor his |
|  | California N I T   |
| Date Will C. 21000   |  |

### FORM Nº NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES. As required by the Provision of the ASME Code Rules, Section III, Div. 1

RS0-1429-00

| 1.                         | (a) Manufactured by Flowserve Corp., 701 First Street, Williamsport, PA 17701  |
|----------------------------|--|
|                            | (b) Manufactured to: Edison Material Supply, P.O. Box 700, Rosemead, CA 91770  |
|                            | (Hame and andrem of R Certificate Houses for completes success companies)  |
| 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/PDrawing Prepared by Flowserve Corp.   |
|                            | (b) Description of Pan Inspected Disc, Heat No. 8546J SA479-316  |
|                            | (c) Applicable ASKE Code: Section III, Edition 1971, Addenda date Sum 173, Case No Class 1   |
| 3.                         | Remarks: 2"-1500#/600# Y-Globe Valve   |
|                            | Flowserve S.O. & Item No.: E-074R-1  |
|                            | No hydrotest performed.  |
|                            |  |
| fon<br>(Th<br>icat<br>Inc. | We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code comms to the rules of construction of the ASME Code Section III.  e applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certifice Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not little in the component Design Specification and Stress Report.)  Signed Flowserve Corp.  (NPT Certificate Holder) |
|                            | N1713  |
| Ce:                        | rtificate of Authorization Expires 4/15/01 Certificate of Authorization No. N1713  |
| Cei                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)   |
| Cer                        | rtificate of Authorization Expires 4/15/01 Certificate of Authorization No. N1/13  |
| Cer                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)   |
| Ce                         | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  Design information on file at  |
| Cer                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  Design information on file at  |
| Cer                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  Design information on file at  |
| Cer                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  Design information on file at  Design specifications certified by  |
| Cer                        | CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  Design information on file at  |

<sup>&</sup>quot;Supplemental shorts in form bilists, skotches or drawings may be used provided (1) size is 84" g 12", (2) information in items 1-2 on this Data forms is included as one, seen, seen, seen to be a supplement of seven is recovered in seen 2, "horsered".

| 1. Owner: Southern California Edison Company                  | Date: 06/23/06                            | Shee                | Sheet 1 of 1    |                                  |                                 |                           |                   |  |
|---|---|---------------------|-----------------|----------------------------------|---------------------------------|---------------------------|-------------------|--|
| Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |   |                     | Unit: 2         | Unit: 2                          |                                 |                           |                   |  |
| <ol><li>Plant: San Onofre<br/>Address: P.O. Box 1</li></ol>   | Nuclear Generating<br>28, San Clemente, G |                     | 0128            |                                  | Repair/Replacement Plan: GEN-24 |                           |                   |  |
| 3. Work Performed by:   | Southern Californ                         | ia Edison Compar    | ıv              | MO/CWO: 0406056                  | 0001                            |                           |                   |  |
| Address: 2244 Waln  |   | •                   | -               | Type Code Symbol S               |                                 |                           |                   |  |
| A Identification of Su  | stame Danatas Caal                        | a.m.t               |                 | Expiration Date:                 | Authorization No: N/A           |                           |                   |  |
| 4. Identification of Sys                                      | stem: Reactor Cool                        | ant                 |                 | <b>2.1.p.1</b>                   |                                 |                           |                   |  |
| 5. (a) Applicable Cons  | truction Code: ASN                        | AE Section III, Cla | ass 1, 197      | 1 Edition, Summer 1971           | Adden                           | <u>da</u>                 |                   |  |
| (h) Applicable Editi  | on of Section XI Uti                      | ilized for Repair/R | enlacem         | ent Activity: <u>1995 Editio</u> | n 1996                          | 6 Addenda                 |                   |  |
| •••   |   | mizou ioi itopugii  | оргиосия        |                                  | 4,77                            | 7110001100                |                   |  |
| 6. Identification of Cor                                      | nponents:                                 | ·                   | · · · · · · · · |                                  | ,                               |                           | 1                 |  |
| Name of Component   | Name of Manufacturer                      | Manufacturer        | National        | Other Identification             | Year                            | Corrected,<br>Removed, or | ASME<br>Code      |  |
|   |   | Serial No.          | Board<br>No.    |                                  | Built                           | Installed                 | Stamped<br>Yes/No |  |
| Pressurizer Manway  | CE  | 70602               | 21495           | S21201ME087                      | 1976                            |                           | Yes               |  |
| _   |   |                     | 1               |                                  |                                 |                           |                   |  |
| 1-1/2"- 14-1/4"   | Westinghouse                              | Ht. Code S417       | N/A             | RSO-1241-05, SA540 Gr            | N/A                             | Installed                 | No                |  |
| Plasmabond Studs (20)   |   |                     |                 | B24                              |                                 |                           |                   |  |
| 1-1/2"-8 UN Heavy Hex   | Westinghouse                              | Ht. Code S406       | N/A             | RSO-1241-05, SA193 Gr.           | N/A                             | Installed                 | No                |  |
| Nut (20)  | Westinghouse                              | Hi. Code 5400       | IN/A            | B7                               | IVA                             | Installed                 | NO                |  |
|   | <u> </u>                                  | <u> </u>            |                 |                                  | <u>.l.</u>                      | <u> </u>                  | <u></u>           |  |
| 7. Description of Work  | c:  |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 | ement bolting in accordan        | ce with                         | RRP GEN-2                 | 40. A V           |  |
| 1 examination was pe  | erformed on the repl                      | acement bolting v   | vith satisf     | actory results.                  |                                 |                           |                   |  |
| Note: Pressure Testi  | ng/VT-2 performed                         | per procedure SO    | 23-XVII         | -3.1.1.                          |                                 | ÷                         |                   |  |
|   |   |                     | •               |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
|   |   |                     |                 |                                  |                                 |                           |                   |  |
| 8. Tests Conducted: Hyd                                       | drostatic D                               | neumatic :          | Vominal C       | perating Pressure X              | Zvemne                          |                           | let .             |  |
| o. resis conducted. Hy  | uiosiatio ri                              |                     |                 |                                  |                                 | _                         | ner               |  |
|   |   | Р                   | ressure:        | ≥2250 psi Test T                 | emp: $\frac{3}{2}$              | ≥ 280 F                   |                   |  |

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: Supervising ASME Codes Engineer Date: 7/3/66 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.  Commissions  Commissions  National Board, State, Province, and Endorsements  |
| Date Chilip le, 2006   |

| <ol> <li>Owner: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> </ol> |  |  |                          | 1                    | Date: 07/06/06 Sheet 1 of 1   |                  |  | 1 of 1                            |  |
|---|--|--|--------------------------|----------------------|---|------------------|--|-----------------------------------|--|
| 2. Plant: San Onofre<br>Address: P.O. Box I   | Nuclear Generating                             | Station                                |                          | Repair               | Repair/Replacement Plan: GEN-205p                                       |                  |  |                                   |  |
| 3. Work Performed by:<br>Address: 2244 Waln   |  | •                                      | _                        | Туре                 | MO/CWO: 04060577001  Type Code Symbol Stamp: N/A  Authorization No: N/A |                  |  |                                   |  |
| 4. Identification of Sys  | stem: Reactor Cool                             | ant                                    |                          | Expira               | ation Date:   |                  | N/A                                    |                                   |  |
| 5. (a) Applicable Const   | truction Code: ASM                             | 1E Section III, Cla                    | ss 1, 197                | 1 Edition,           | Summer 1971 A   | Adden            | <u>da.</u>                             |                                   |  |
| (b) Applicable Edition  | on of Section XI Uti                           | lized for Repair/R                     | eplaceme                 | ent Activity         | y: <u>1995 Editior</u>  | ı <u>, 199</u> 0 | 5 Addenda                              |                                   |  |
| 6. Identification of Con  | nponents:                                      |  |                          |                      |   |                  |  |                                   |  |
| Name of Component   | Name of Manufacturer                           | Manufacturer<br>Serial No.             | National<br>Board<br>No. | Other 1              | Identification  | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| Steam Generator<br>Manway   | CE   | 71270-1                                | 22218                    | S21301MI             | E089P   | 1976             |  | Yes                               |  |
| 1-1/2" x 14-1/4" All-<br>Thread Stud (1)  | Energy Steel &<br>Supply Co.                   | Ht. #96894, Lot<br>Code DUE5           | N/A                      | RSO-1144<br>B24 (RoR | -97, SA540<br>-025-03)  | N/A              | Installed                              | No                                |  |
| 1-1/2"-8 Heavy Hex Nut<br>(1)   | Westinghouse                                   | Ht. #7421869                           | N/A                      | RSO-2503             | 3-04, SA193 B7  | N/A              | Installed                              | No                                |  |
| 7. Description of World   | C:   | <u> </u>                               | .l <u></u> .             | l                    |   | 1                | l                                      | <u> </u>                          |  |
| Prior to reinstalling the bolting. It was disconseach nut were replaced was performed on the                                    | vered that the nut in<br>ed for hole #2 with i | hole #2 was sieze<br>n-kind replacemen | d on the                 | stud and re          | equired replacer  | nent.            | (1) each stud a                        | ind (1)                           |  |
| Note: Pressure Testi  | ng/VT-2 performed                              | per procedure SO                       | 23 <b>-</b> XVII         | -3.1.1.              |   |                  |  |                                   |  |
|   |  |  |                          |                      |   |                  |  |                                   |  |
|   |  |  |                          |                      |   |                  |  |                                   |  |
|   |  |  |                          |                      |   |                  |  |                                   |  |
|   |  |  |                          |                      |   |                  |  |                                   |  |
|   |  |  |                          |                      |   |                  |  |                                   |  |
| 8. Tests Conducted: Hy  | drostatic P                                    |  |                          | perating Pr          |   | Exempt           | Othe                                   | er 🔃                              |  |

| (Applicable   | Manufacturer's Data Reports to be attached)   |
|---|---|
| CERT  | TIFICATE OF COMPLIANCE  |
| I certify that the statements made in the report a Code, Section XI.  | are correct and that this conforms to the requirements of the ASME  |
| Type Code Symbol Stamp: N/A   |   |
| Certificate of Authorizaton No: N/A   | Expiration Date: N/A  |
| Signed: Owner's Designee, Title   | Supervising ASME Codes Engineer Date: 7/6/06  |
| CERTIFI   | ICATE OF INSERVICE INSPECTION   |
| the State or Province of <u>California</u> , and employees described in this Owner's Report during the pet the best of my knowledge and belief, the Own this Owner's Report in accordance with the red By signing this certificate, neither the Inspect the examinations and corrective measures described. | ner has performed examinations and taken corrective measures described in quirements of the ASME Code, Section XI.  or nor his employer makes any warranty, expressed or implied, concerning cribed in this Owner's Report. Furthermore, neither the Inspector nor his y personal injury or property damage or a loss of any kind arising from or |
| Inspector's Signature  Date 11, 2000  | Commissions 1974 California NFL National Board, State, Province, and Endorsements   |

| Owner: Southern C     Address: 2244 Wali |                             |                            | nia 91770                | n  | 07/06/06                 |               | Shee                                   | t 1 of 1                          |
|--|-----------------------------|----------------------------|--------------------------|--|--------------------------|---------------|--|-----------------------------------|
| 2. Plant: San Onofre                     | Nuclear Generating          | Station                    |                          | Unit:  | /Replacement             | Plan: 0       | 40200422-77                            |                                   |
| 3. Work Performed by                     |                             | ia Edison Compan           | ıy                       | MO/CWO: 04071329000  Type Code Symbol Stamp: N/A Authorization No: N/A |                          |               |  |                                   |
| 4. Identification of Sy                  | stem: Reactor Cool          | ant                        |                          |  | tion Date:               |               | N/A<br>N/A                             |                                   |
| 5. (a) Applicable Cons                   | struction Code: ASN<br>474- |                            | ass 1(NB)                | ) <u>, 1971 Ed.</u>  | , Summer 1972            | 2 Add.        | And Code Ca                            | <u>se: N-</u>                     |
| (b) Applicable Editi                     | ion of Section XI Uti       | ilized for Repair/R        | teplaceme                | ent Activity   | r: 1995 Editio           | on, 1990      | 5 Addenda                              |                                   |
| 6. Identification of Co                  | mponents:                   |                            |                          |  |                          |               |  |                                   |
| Name of Component                        | Name of Manufacturer        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other I  | dentification            | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Thermowell -<br>INCONEL 690              | Weed Instr. Co.             | N15771                     | N/A                      | 2TE9178-3  | 3                        | N/A           | Removed                                | No                                |
| Thermowell -<br>INCONEL 690              | Weed Instr. Co.             | N18560                     | N/A                      | RSO-2130<br>under RRI  | -04, Fabbed<br>2-003-04  | N/A           | Installed                              | No                                |
| Thermowell -<br>INCONEL 690              | Weed Instr. Co.             | N15762                     | N/A                      | 2TE0111Y   | 71 (0911-Y1)             | N/A           | Removed                                | No                                |
| Thermowell -<br>INCONEL 690              | Weed Instr. Co.             | N18555                     | N/A                      | RSO-2130<br>under RRI  | 9-04, Fabbed<br>P-003-04 | N/A           | Installed                              | No                                |
| 7. Description of Wor                    | .l<br>k:                    | <u> </u>                   | _i                       | <u> </u>   |                          | <u> </u>      | <u> </u>                               |                                   |
| Replaced the existing 040200422-38. The  | g thermowells in pla        |                            |                          |  |                          |               |  | ECP                               |
| Note: Pressure Test                      | ing/VT-2 performed          | per procedure SO           | 23-XVII                  | -3.1.1.  |                          |               |  |                                   |
|  |                             |                            |                          |  |                          |               |  |                                   |
|  |                             |                            |                          |  |                          |               |  |                                   |
|  |                             |                            |                          |  |                          |               |  |                                   |
|  |                             |                            |                          |  |                          |               |  |                                   |
|  |                             | <del></del>                |                          |  | <del></del>              |               |  |                                   |
| 8. Tests Conducted: Hy                   | ydrostatic P                | <del></del>                |                          |  |                          | Exempt        |  | er                                |
|  |                             | P                          | ressure:                 | ≥ 2250 p   | sı Test I                | emp:          | ≥28U F                                 |                                   |

| (Applicab  | ole Manufacturer's Data Reports to be attached)                      |
|--|--|
| CER  | TIFICATE OF COMPLIANCE   |
| I certify that the statements made in the report Code, Section XI. | t are correct and that this conforms to the requirements of the ASME |
| Type Code Symbol Stamp: N/A  |  |
| Certificate of Authorizaton No: N/A                                | Expiration Date: N/A   |
| Signed: MMol   | Supervising ASME Codes Engineer Date: 7/6/05                         |

# 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 12600 to 1600 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 AET National Board, State, Province, and Endorsements

|   | Owner: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |                            | Date: 04/05/06           | Date: 04/05/06 Shee                               |   | 1 of 1                                 |                                   |  |  |
|---|--|----------------------------|--------------------------|---|---|--|-----------------------------------|--|--|
|   |  | -                          | na 91770                 | Unit: 2   | Diane (   | //0200/22-7 <b>9</b>                   |                                   |  |  |
| <ol><li>Plant: San Onofre<br/>Address: P.O. Box 1</li></ol> | Nuclear Generating<br>128, San Clemente, (   |                            | 0128                     |   | Repair/Replacement Plan: 040200422-78             |  |                                   |  |  |
| 3. Work Performed by  | : Southern Californ  | ia Edison Compan           | ıy                       |   | MO/CWO: 04071330000                               |  |                                   |  |  |
| Address: 2244 Walı  | nut Grove Avenue, R  | osemead, Californ          | nia 91770                | Authorization No:                                 | Type Code Symbol Stamp: N/A Authorization No: N/A |  |                                   |  |  |
| 4. Identification of Sy                                     | stem: Reactor Cool   | ant                        |                          | Expiration Date:                                  | •   | N/A                                    |                                   |  |  |
| 5. (a) Applicable Cons                                      | struction Code: ASN 474-   |                            | ass 1(NB)                | ), 1971 Ed., Summer 197                           | /2 Add.   | And Code Ca                            | se: N-                            |  |  |
| (b) Applicable Editi  | on of Section XI Uti   | lized for Repair/R         | teplaceme                | ent Activity: 1995 Editi                          | on, 1996  | 5 Addenda                              |                                   |  |  |
| 6. Identification of Con                                    | mponents:  |                            |                          |   |   |  |                                   |  |  |
| Name of Component   | Name of Manufacturer   | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                              | Year<br>Built                                     | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |  |
| Thermowell -<br>INCONEL 690                                 | Weed Instr. Co.  | N15763                     | N/A                      | 2TE9179-1   | N/A   | Removed                                | No                                |  |  |
| Thermowell -<br>INCONEL 690                                 | Weed Instr. Co.  | N18553                     | N/A                      | RSO-2130-04, Fabbed under RRP-003-04              | N/A   | Installed                              | No                                |  |  |
| Thermowell -<br>INCONEL 690                                 | Weed Instr. Co.  | N15757                     | N/A                      | 2TE9179-3   | N/A   | Removed                                | No                                |  |  |
| Thermowell -<br>INCONEL 690                                 | Weed Instr. Co.  | N18568                     | N/A                      | RSO-2130-04, Fabbed<br>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, Fabbed<br>under RRP-003-04           | N/A   | Installed                              | No                                |  |  |
| 7. Description of World                                     | !  | <u> </u>                   | <u> </u>                 | <u> </u>  | \   |  |                                   |  |  |
| Replaced the existing                                       | g thermowells in pla<br>The replacement th   | ermowells have a           | modified                 | E9179-1, 2TE9179-3, and length to limit the insta |   |  | 25-1 per                          |  |  |
| 8. Tests Conducted: Hy                                      | rdrostatic Pi  |                            |                          | perating Pressure X ≥ 2250 psi Test               | Exempt Temp: ≥                                    |  | er                                |  |  |

| 9. Remarks: None.  |                   |
|--|-------------------|
| (Applicable Manufacturers Data Reports to be attached)   | <del></del>       |
| 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: 7/4/06 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 Inspector the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the comp described in this Owner's Report during the period 42605 to 7/5/06, and state the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures describ this Owner's Report in accordance with the requirements of the ASME Code, Section XI. | onents<br>that to |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concer the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor employer shall be Iiable in any manner for any personal injury or property damage or a loss of any kind arising from connected with this inspection.  Commissions  Commissions  National Board, State, Province, and Endorsements   | his               |
| Date July le, 2006   |                   |

As Required by the Provisions of the ASME Code Section  $\boldsymbol{X}\boldsymbol{I}$ 

| 1. Owner: Southern C<br>Address: 2244 Waln |   |                            | nia 91770                | Date: 04/05/06  Unit: 2                               |               | Sheet                                  | 1 of 1                           |
|--|---|----------------------------|--------------------------|---|---------------|--|----------------------------------|
| 2. Plant: San Onofre<br>Address: P.O. Box  | Nuclear Generating<br>128, San Clemente, G  |                            | 0128                     | Repair/Replacement                                    |               | 40200422 <b>-7</b> 9                   |                                  |
| 3. Work Performed by<br>Address: 2244 Waln |   |                            | _                        | Authorization No:                                     | tamp:         | N/A                                    |                                  |
| . Identification of Sy                     | stem: Reactor Cool                          | ant                        |                          | Expiration Date:                                      |               | N/A                                    |                                  |
| . (a) Applicable Cons                      | truction Code: ASN 474-                     |                            | iss 1(NB)                | ), 1971 Ed., Summer 1972                              | Add.          | And Code Cas                           | se: N-                           |
| (b) Applicable Editi                       | ion of Section XI Uti                       | ilized for Repair/R        | .eplaceme                | ent Activity: 1995 Editio                             | n, 1990       | 6 Addenda                              |                                  |
| . Identification of Co                     | mponents:                                   |                            |                          |   |               |  |                                  |
| Name of Component                          | Name of Manufacturer                        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                                  | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stampe<br>Yes/Ne |
| Thermowell -<br>INCONEL 690                | Weed Instr. Co.                             | N12968                     | N/A                      | 2TE9178-2   | N/A           | Removed                                | No                               |
| Thermowell -<br>INCONEL 690                | Weed Instr. Co.                             | N18556                     | N/A                      | RSO-2130-04, Fabbed<br>under RRP-003-04               | N/A           | Installed                              | No                               |
| Thermowell -<br>INCONEL 690                | SCE   | 163-97                     | N/A                      | 2TE9178-4   | N/A           | Removed                                | No                               |
| Thermowell -<br>INCONEL 690                | Weed Instr. Co.                             | N18561                     | N/A                      | RSO-2130-04, Fabbed<br>under RRP-003-04               | N/A           | Installed                              | No                               |
| Thermowell -<br>INCONEL 690                | Weed Instr. Co.                             | N12973                     | N/A                      | 2TE0115-2 (2TE0915-2)                                 | N/A           | Removed                                | No                               |
| Thermowell -<br>INCONEL 690                | Weed Instr. Co.                             | N18562                     | N/A                      | RSO-2130-04, Fabbed<br>under RRP-003-04               | N/A           | Installed                              | No                               |
| 7. Description of Wor                      | k:  | J                          | <u> </u>                 |   | <u> </u>      | <u> </u>                               | _!                               |
| Replaced the existing                      | g thermowells in pla<br>-38. The replacemen | nt thermowells hav         | ve a mod                 | E9178-2, 2TE9178-4, and ified length to limit the ins |               |  |                                  |
| 8. Tests Conducted: Hy                     | vdrostatic P                                |                            |                          | Operating Pressure X ≥ 2250 psi Test T                | Exempt        |  | er .                             |

| ( A nalicable | : Manufacturer's | Data Penner | •• | ١. | etteche  | a |
|---------------|------------------|-------------|----|----|----------|---|
| (whhere ou    |                  | Date Ichoin |    | ~  | BUILDING | • |

### 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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>4260S</u> to <u>7/5/06</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions

California

al Board, State, Province, and Endorsements

Date July le 2006

| 1. Owner: Southern California Edison Company Address: 2244 Walnut Grove Avenue, Rosemead, California 91770                |  |  | Date: 04/05/06           |  |                                       | 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: 040200422-80 |  |                                   |  |
|   |  |  |                          |  | MO/CWO: 04071332001                   |  |                                   |  |
| 3. Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |  |  |                          | Authorization No:                                      | •                                     | N/A                                    |                                   |  |
| 4. Identification of Sys  | stem: Reactor Cool                         | ant                                    |                          | Expiration Date:                                       |                                       | N/A                                    |                                   |  |
| 5. (a) Applicable Cons  | truction Code: ASN 1.                      | ΛE Section III, Cl                     | ass 1(NB)                | ), 1971 Ed., Summer 1972                               | Add.                                  | And Code Ca                            | se N-474                          |  |
| (b) Applicable Edition  | on of Section XI Ut                        | ilized for Repair/F                    | Replaceme                | ent Activity: 1995 Editio                              | n, 1996                               | 5 Addenda                              |                                   |  |
| 6. Identification of Cor  | mponents:                                  |  |                          |  |                                       |  |                                   |  |
| Name of Component   | Name of Manufacturer                       | Manufacturer<br>Serial No.             | National<br>Board<br>No. | Other Identification                                   | Year<br>Built                         | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>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, Fabbed<br>under RRP-003-04                | N/A                                   | Installed                              | No                                |  |
| Thermowell -<br>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, Fabbed<br>under RRP-003-04                | N/A                                   | Installed                              | No                                |  |
| 7. Description of Work  | <u>·</u>                                   |  | .1                       | L.,,,,,  |                                       | <u></u>                                | - <del>!</del>                    |  |
| Replaced the existing 040200422-38. The   | g thermowells in pla<br>replacement thermo | nt instrument loca<br>wells have a mod | tions 2TI<br>ified leng  | E9179-4, and 2TE0121-Y<br>th to limit the installed in | (2(092)<br>sertion                    | l-Y2) per ECI<br>depth.                | P                                 |  |
| Note: Pressure Testi  | ng/VT-2 performed                          | per procedure SC                       | 23-XVII                  | -3.1.1.  |                                       |  |                                   |  |
|   |  |  |                          |  |                                       |  |                                   |  |
|   |  |  |                          |  |                                       |  |                                   |  |
|   |  |  |                          |  |                                       |  |                                   |  |
|   |  |  |                          |  |                                       |  |                                   |  |
| 8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Exempt Other                                       |  |  |                          |  | er                                    |  |                                   |  |
|   |  | F                                      | ressure:                 | $\geq$ 2250 psi Test T                                 | emp:                                  | ≥280 °F                                |                                   |  |

| (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: 7/6/06 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 12005 to 7/5/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in |  |  |  |  |  |

| 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 4 210 05 to 7/5/00, 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.  |  |  |  |  |  |
|  |  |  |  |  |  |
| Stunta Mastern Commissions 1574 California N &I  |  |  |  |  |  |
| Inspector's Signature National Board, State, Province, and Endorsements  |  |  |  |  |  |
| inspector's Signature inational Board, State, Province, and Endorsements   |  |  |  |  |  |
| ·  |  |  |  |  |  |
|  |  |  |  |  |  |
| $-\Lambda \Lambda \Lambda$   |  |  |  |  |  |
| Date Culy Co. 2000   |  |  |  |  |  |
| /) <i>(</i> \ '*' '  |  |  |  |  |  |
|  |  |  |  |  |  |

As Required by the Provisions of the ASME Code Section  $\boldsymbol{X}\boldsymbol{J}$ 

| <ol> <li>Owner: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Plant: San Onofre Nuclear Generating Station<br/>Address: P.O. Box 128, San Clemente, California 92674-0128</li> <li>Work Performed by: Southern California Edison Company</li> </ol> |   |                                     | Date: 01/1               | 7/06  | Shee                              | tl ofl                                 |                                   |
|---|---|-------------------------------------|--------------------------|---|-----------------------------------|--|-----------------------------------|
|   |   |                                     | Repair/Repl              | Unit: A Repair/Replacement Plan: 004b-04, 005b-04 MO/CWO: 04090617000 04090683000 |                                   |  |                                   |
| Address: 2244 Walnut Grove Avenue, Rosemead, California 91770   |   |                                     |                          | Authorization   |                                   | N/A<br>N/A<br>N/A                      |                                   |
| <ol> <li>Identification of System: Reactor Coolant Expiration Date: N/A</li> <li>(a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda and Code Case N-474-1</li> </ol>  |   |                                     |                          |   | Case N-                           |  |                                   |
| (b) Applicable Editi  | on of Section XI Ut   | ilized for Repair/Re                | eplaceme                 | ent Activity: 19  | 95 Edition, 199                   | 6 Addenda                              |                                   |
| 6. Identification of Con Name of Component  | nponents:  Name of Manufacturer                                   | Manufacturer<br>Serial No.          | National<br>Board<br>No. | Other Identific   | cation Year<br>Built              | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Inconel 690 Round Bar<br>Stock (Nozzle Assy)  | Special Metals<br>Corp.   | Ht. #NX3189HK                       | N/A                      | RSO-1778-03, A<br>#04090617-2   | ssy N/A                           |  | No                                |
| SA479 Tp 316L Round<br>Bar Stock (Safe-End)   | Energy Steel &<br>Supply Co.                                      | Ht. #48390, Lot<br>Code DTZ2        | N/A                      | RSO-1133-97-01<br>End #04090617-  |                                   |  | No                                |
| 7. Description of Work<br>Fabricated a new half<br>ECN A14730. The m<br>NDE were performed<br>serialized as 005b-04   | nozzle for Steam G<br>aterials were machi<br>I in accordance with | ned per MO 04090<br>weld record WR2 | 617 and<br>/3-04-35      | Repair Replacer<br>5, and MO 0409   | nent Plan 004b-<br>0683. The comp | 04. All weldi<br>pleted nozzle v       | ng and                            |
| 8. Tests Conducted: Hyd   | drostatic Pr  |                                     | ominal O                 |   | Exempt Test Temp: 1               | _                                      | r                                 |

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 Authorization No: N/A

Expiration Date: N/A

Signed:

Supervising ASME Codes Engineer

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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>9-20-2004</u> to <u>2-16-2006</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions SO24 N, NS T California 1862
National Board, State, Province, and Endorsements

Inspector's Signature

| Owner: Southern California Edison Company     Address: 2244 Walnut Grove Avenue, Rosemead, California 91770   |                      |                                | Date: 06/20/06           | Date: 00/20/00   |  | 1 of 1                                 |                                   |
|---|----------------------|--------------------------------|--------------------------|--|--|--|-----------------------------------|
| Plant: San Onofre Nuclear Generating Station     Address: P.O. Box 128, San Clemente, California 92674-0128   |                      |                                | Unit: 2                  | Unit: 2 Repair/Replacement Plan: ASME SECTION XI DATA-0173 |  |  |                                   |
| <ol> <li>Work Performed by: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Identification of System: Reactor Coolant</li> </ol>  |                      |                                |                          | Type Code Symbol S   | MO/CWO: 04121088000  Type Code Symbol Stamp: N/A Authorization No: N/A |  |                                   |
|   | 1974                 | 1 Ed., S.'74 Add. (i           | inlet flan               |  |  |  | lass 1,                           |
|   |                      | lized for Repair/R             | eplaceme                 | ent Activity: 1995 Edition                                 | n, 1990  | 6 Addenda                              |                                   |
| 6. Identification of Cor  | Name of Manufacturer | Manufacturer<br>Serial No.     | National<br>Board<br>No. | Other Identification                                       | Year<br>Built  | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 6" x 8" Pressurizer<br>Safety Valve   | Dresser              | BU06253                        | N/A                      | 2PSV0200   | 1980   | Removed                                | Yes                               |
| 6" x 8" Pressurizer<br>Safety Valve   | Dresser              | BU06254                        | N/A                      | RSO-2280-05  | 1980   | Installed                              | Yes                               |
| 2"-8UN-2A x 14-1/2"<br>Studs (8)  | Westinghouse         | Ht. #1M37459,<br>Ht. Code S404 | N/A                      | RSO-1241-05 (7 ea.)/<br>RSO-1838-05 (1 ea.)                | N/A  | Installed                              | No                                |
| 2"-8UN Heavy Hex<br>Nuts (16)   | Westinghouse         | Ht. #8960108, Ht.<br>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: Hy  | drostatic P          |                                |                          | operating Pressure $X$ ≥ 2250 psi Test T                   |  | Othe<br>≥ 280 ° F                      | er 🗍                              |

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

| CERTIFICATE OF C  | OMPLIANCE   |
|---|---|
| I certify that the statements made in the report are correct and t Code, Section XI.  | hat this conforms to the requirements of the ASME   |
| Type Code Symbol Stamp: N/A   |   |
| Certificate of Authorizaton No: N/A   | Expiration Date: N/A  |
| Signed: Supervisin Owner or Owner's Designee, Title   | g ASME Codes Engineer Date: 6/31/06   |
| CERTIFICATE OF INSI   |   |
| I, the undersigned holding a valid commission issued by the N the State or Province of California, and employed by HSBC described in this Owner's Report during the period 11/21/21/21/21/21/21/21/21/21/21/21/21/2 | Idational Board of Boiler and Pressure Vessel Inspectors and T of Hartford, Connecticut have inspected the components 05 to 6/25/06, and state that to d examinations and taken corrective measures described in e ASME Code, Section XI.  In the system of the system of the pressure of the |
| connected with this inspection.  Commissions  | 1574 California N & I   |
| Inspector's Signature   | National Board, State, Province, and Endorsements   |
| Date_6/25/06  |   |

REPLACEMENT = 2280 - 05 - 00

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

テムからん Purchase Order # 6F2T7901 Rel #A002 1. Work performed by: NWS Technologies, LLC 131 Venture Boulevard, Spartanburg, SC 29306 2. Work performed for: Southern California Edison San Onofre Nuclear Generating Station 3/4. Owner - name, address and identification of nuclear power plant: 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 BU06254 n/a steam 6 x 8 1980 (mfr's S/N) (NB#) (service) (size) (type) (yr.built) d: Construction Code: ASME Sec. III 1974 n/a n/a 1 (name/section/division) (addenda) (Code Cases(s)) (edition) (Code Class) 6. ASME Code Section XI applicable for inservice inspection: 1995 1996 n/a (addenda) (Code Case(s)) (edition) 7. ASME Code Section XI used for repairs, replacements: 1996 1995 n/a (edition) (addenda) (Code Case(s)) 1974 B. Construction Code used for repairs, replacements: 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 05-258. CERTIFICATE OF COMPLIANCE certify that to the best of my knowledge and belief the statements made in this Cesar V. Sierra 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. to use the "VR" stamp expires National Board Certificate of Authorization No. 632 April 3, 2006. National Board Certificate of Authorization No. B1 to use the "NR" stamp expires April 9, 2006. 17 NWS Technologies, LLC Manager, QA Date Repair Organization Authorized representative Title CERTIFICATE OF INSPECTION 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 170, Zoos 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. Futhermore, 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. NB # 8462, A, N, I Commissions (NB (incl endorsements), jurisdiction, & no.)

As Required by the Provisions of the ASME Code Section XI

| 1. Owner: Southern California Edison Company Date: |
|--|
|--|

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

Unit: 2

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station

Address: P.O. Box 128, San Clemente, California 92674-0128

MO/CWO: 04121113000

Repair/Replacement Plan: ASME SECTION XI

**DATA-0185** 

3. Work Performed by: Southern California Edison Company

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

Type Code Symbol Stamp: N/A Authorization No:

**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<br>Serial No.             | National<br>Board<br>No. | Other Identification  | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------------|------------------------|--|--------------------------|-----------------------|---------------|--|-----------------------------------|
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0014                         | N/A                      | 2PSV8401              | 1976          | Removed                                | Yes                               |
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0026                         | N/A                      | RSO-1824-05           | 1984          | Installed                              | Yes                               |
| 1-3/8" x 9" Inlet Stud<br>(12)      | Westinghouse           | Ht. #37751, Ht.<br>Code S418           | N/A                      | RSO-1241-05, SA193 B7 | N/A           | Installed                              | No                                |
| 1-3/8"- 8 Heavy Hex<br>Nut (12)     | Westinghouse           | Ht.<br>#8966364Q8234,<br>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 | X      | Exempt    | Other |  |
|---------------------|------------------|-------------|----------------------------|--------|-----------|-------|--|
|                     | See: AR 05100114 | <u>5-10</u> | Pressure: ≥ 1001 psi       | Test ' | Temp: N/A | °F    |  |

# 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: 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 12/27/05 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.  |
| Inspector's Signature  Commissions  1574  California  National Board, State, Province, and Endorsements   |
| Date 7/7/06   |

|     | FORM NVR-1 REPORT OF REPAIR X, 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  |
| 2.  | (address)  Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  (name and address)  Owner SOUTHERN CALIFORNIA EDISON COMPANY   |
| э.  | (name)   |
| 4.  | Name, address and identification of nuclear power plant  SAN ONOFRE 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)   |
|     | ASME Code Section XI applicable for Inservice inspection 1995 1996  (edition) (addenda) (Code Case(s))  ASME Code Section XI used for repairs, modifications, or replacements 1995 1996  (edition) (addenda) (Code Case(s))  |
|     | Construction Code used for repairs, modifications, or replacements 1974 S1974 —— (edition) (addenda) (Code Case(s))  Design responsibilities ANDERSON GREENWOOD CROSBY   |
| 11. | Opening pressure 1085 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment made at ANDERSON GREENWOOD CROSBY using STEAM (location) (test medium)  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  Remarks CAPACITY 818,684 LBS/HR   |
|     | Remarks CALACIA I STO,004 BBJAIK   |

RS0-1824-05-00

Form NVR-1 (Back)

Certificate Holder's Serial Nos. N58737-01-0026

-RSO\_-1824-05-00

| CERTIFICATE OF COMPLIANCE  1. Roj. B. Log.   Certify that the statements made in this report are correct and the repair, modification of 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   55   Signed   Anderson Greenwood/Crosby   August   Sr. O.A. (Againette   VR)   OA MGR. (name of repair organization)   (authorized representative)   (ititle)      CERTIFICATE OF INSPECTION   (authorized representative)   (ititle)   |   |
|---|---|
| Terplacement 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 April 55, Signed Anderson Greenwood/Crosby (name of repair organization)  CERTIFICATE OF INSPECTION  1. Vish (VER. (authorized representative)  CERTIFICATE OF INSPECTION  1. Vish (VER. (authorized representative)  ANGR. (ititle)  CERTIFICATE OF INSPECTION  1. Vish (VER. (authorized representative)  ANGR. (ititle)  CERTIFICATE OF INSPECTION  1. Vish (VER. (authorized representative)  ANGR. (authorized representative)  ANGR. (ititle)  ANGR. (ititle)  ANGR. (authorized representative)  ANGR. (ititle) | CERTIFICATE OF COMPLIANCE   |
| National Board Certificate of Authorization No.  No.  No.  No.  No.  No.  No.  No.   | replacement of the pressure relief device described above conforms to Section XI of the ASME Code and the National  |
| CERTIFICATE OF INSPECTION  1. VISH LYCL, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of   | National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp expires JAN. 14,2007   |
| 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 \$-23, 205 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 Codeand 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 29 August 65. Signed Anderson Greenwood/Crosby May Sr. QA Cognice For QA MGR.  (name of repair organization) (authorized representative) (title)   |
| 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 \$-23, 205 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 Codeand 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.   |   |
| 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 \$-23,205 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 Codeand 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.  |   |
| 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 \$-23,205 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 Codeand 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.  |   |
| Inspectors and certificate of competency issued by the jurisdiction of HARTFORD - CT. have inspected the repair, modification or replacement described in this report on S-23, 2025 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 Codeand 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.   | CERTIFICATE OF INSPECTION   |
| best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Codeand 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.   | Inspectors and certificate of competency issued by the jurisdiction of MASSACHUSETTS and employed by HSB-CT of HARTFORD - CT. have  |
| 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.   | best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the ASME Codeand the National Board Inspection Code "VR" and "NR" rules.  |
|   | 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 |
| <del></del>   |   |
| Signed Commissions MA1420 A, N, I  (Inspector) (Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)   |   |

39 A TO FOLLOW

As Required by the Provisions of the ASME Code Section XI

| 1. Owner: Southern Ca<br>Address: 2244 Waln                  |  |   | :. 01 <i>77</i>          | Date: 06/20/06  |                    | Sheet                                  | 1 of 1                            |
|--|--|---|--------------------------|---|--------------------|--|-----------------------------------|
|  | •  |   | 14 91//                  | Unit: 2   |                    |  |                                   |
| 2. Plant: San Onofre Address: P.O. Box 1                     |  |   | 128                      | Repair/Replacement l  |                    | ASME SECTIO<br>DATA-0173               | ON XI                             |
| 3. Work Performed by:  | Southern Californ  | ia Edison Compan                            | v                        | MO/CWO: 0412117   |                    |  |                                   |
| Address: 2244 Waln   |  |   | -                        | Type Code Symbol S<br>Authorization No:   | -                  | N/A<br>N/A                             |                                   |
| 4. Identification of Sys                                     | stem: Reactor Cool   | ant   |                          | Expiration Date:  | ,                  | N/A                                    |                                   |
| 5. (a) Applicable Const                                      |  | ME Section III, Cla<br>I Ed., S.'74 Add. (i |                          | 4 Edition, No Addenda (v  | /alve);            | Section III, C                         | lass 1,                           |
| (b) Applicable Edition                                       | on of Section XI Uti   | lized for Repair/Re                         | eplaceme                 | ent Activity: 1995 Edition  | n, 1996            | 6 Addenda                              |                                   |
| 6. Identification of Cor                                     | nponents:  |   |                          |   |                    |  |                                   |
| Name of Component  | Name of Manufacturer   | Manufacturer<br>Serial No.                  | National<br>Board<br>No. | Other Identification  | Year<br>Built      | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 6" x 8" Pressurizer<br>Safety Valve                          | Dresser  | BS03212                                     | N/A                      | 2PSV0201  | 1978               | Removed                                | Yes                               |
| 6" x 8" Pressurizer<br>Safety Valve                          | Dresser  | BS03209                                     | N/A                      | RSO-2280-05   | 1978               | Installed                              | Yes                               |
| 2"-8UN-2A x 14-1/2"<br>Studs (8)                             | Westinghouse   | Ht. #1M37459,<br>Ht. Code S404              | N/A                      | RSO-1241-05   | N/A                | Installed                              | No                                |
| 2"-8UN Heavy Hex<br>Nuts (16)                                | Westinghouse   | Ht. #8960108, Ht.<br>Code S403              | N/A                      | RSO-1241-05   | N/A                | Installed                              | No                                |
| 7. Description of Worl                                       | :  | l   | <u>!</u>                 | I   | <u> </u>           | <u> </u>                               | <u> </u>                          |
| Replaced the pressur valve (s/n BS03209). A VT-1 examination | izer safety valve (s/i<br>Replaced the inlet<br>was performed on t<br>ement valve body w | flange bolting with<br>he replacement bo    | n in-kind<br>Iting and   | on 2PSV0201 with a rebui<br>replacement bolting (8) of<br>a VT-3 examination was<br>e removed valve was place | each stu<br>perfon | uds and (16) ea<br>med on the int      | ach nuts.<br>ernal                |
| Note: Pressure Testi   | ng/VT-2 performed  | per procedure SO                            | 23-XVII                  | -3.1.1.   |                    |  |                                   |
|  |  |   |                          |   |                    |  |                                   |
|  |  |   |                          |   |                    |  |                                   |
| 8. Tests Conducted: Hy                                       | drostatic P  | neumatic N                                  | Iominal C                | Operating Pressure X  | Exempt             | Othe                                   | er 🔃                              |
|  |  | Pi  | ressure:                 | ≥2250 psi Test T  | emp: ≥             | ≥280 °F                                |                                   |

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: Supervising ASME Codes Engineer Date: 6/0/06  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 <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>112105</u> to <u>6/25/06</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  |
| Inspector's Signature  Commissions  Commissions  National Board, State, Province, and Endorsements  |
| Date June 25, 2006  |

| . OF NUCLEAR PRESSURE I   | V  |   | 4105   |  |  |
|---|--|---|--|--|--|
| Work performed by: NWS Technologies, LLC     131 Venture Boulevard, Spartanburg. S  | Purchase Order#<br>SC 29306  | # 6F2T 901 R  | el#A002  |  |  |
| 2. Work performed for: Southern California Edison   |  |   |  |  |  |
| 3/4. Owner - name, address and identification of nuclear power p<br>Units 2/3, 5000 Pacific Coast Highway, San Clemente, CA 9   | plant: San Onofre<br>32672   | Nuclear Gener   | ating Station  |  |  |
| 5. a: Repaired pressure relief device: Pressurizer Safety Valve b: Name of manufacturer: Consolidate / Dresser c: Identifying nos.  |  |   |  |  |  |
| 31709NA BS03209   | n/a steam  |   | 1978   |  |  |
| (type) (mirs S/N)<br>d: Construction Code: ASME Sec. III 1974   | (NB#) (service)  | (size)<br>n/a   | (yr.bulit)   |  |  |
| d. Construction Code: ASME Sec. III 1974  (name/section/division) (edition)   |  | ode 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  |  |  |
| Construction Code used for repairs, replacements:   | (edition)<br>1974  | (addenda)<br>n/a  | (Code Case(s)) n/a   |  |  |
| U. Constitution Code and the Capana, Capana.  | (edition)  | (addenda)   | (Code Case(s))   |  |  |
| 9. Design responsibilities: n/a   |  | <u> </u>  | •  |  |  |
| 10. Opening pressure: 2485 psig Set-pressure adjustment made at: NWS Technologies, LLC using steam  |  |   |  |  |  |
| <ol> <li>Description of work (include name and identifying number of replacements) inspected, lapped, assembled. Certified set-pressure and sea</li> </ol>  |  |   | ibled, cleaned,  |  |  |
| 12. Remarks: Replaced spiral wound gaskets. NWS Traveler 05-2   |  |   |  |  |  |
| CERTIFICATE OF COM  |  |   |  |  |  |
| I, Cesar V. Sierra certify that to the best of my knowledge report are correct and the repair, modification or replacement of the conforms to Section XI of the ASME Code and the National Board National Board Certificate of Authorization No. 632 to use National Board Certificate of Authorization No. 81 to use 10/17/05 NWS Technologies, LLC  | riedge and belief the e pressure relief devided inspection Code "\ the "VR" stamp expection the "NR" stamp expection and the "NR" stamp expection and the state of the the the state of the the state of | vices described VR" and "NR" re pires April 3, pires April 9,                                       | d above<br>rules.<br>. 2006.   |  |  |
| I, Charles F. Toegel Jr. holding a valid commission issued Vessel Inspectors and certificate of competency issued by the juri by Hartford Steam Boiler of CT of Hartford or replacement described in this report on 17cc. 2cc. and stathis repair, modification or replacement has been completed in accode and the National Board Inspection Code "VR" and "NR" rule By signing this certificate, neither the undersigned nor my employer concerning this repair, modification or replacement described in the nor my employer shall be liable in any manner for any personal injurising from or connected with this inspection. | d by The National Bo<br>isdiction of North<br>rd, CT have insp<br>ate that to the best of<br>cordance with Secti<br>es.<br>rer makes any warra<br>his report. Futhermo   | h Carolina and pected the repart of my knowledge tion XI of the of anty, expressed ore, neither the | d employed pir, modification ge and belief, the ASME d or implied, undersigned |  |  |

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

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

As Required by the Provisions of the ASME Code Section XI

| 1. Owner: Southern Ca<br>Address: 2244 Waln                    |   |   | ia 91770                 | Date: 07/06/06  |                   | Sheet                                  | 1 of 1                            |
|--|---|---|--------------------------|---|-------------------|--|-----------------------------------|
|  | Nuclear Generating  | Station                                 |                          | Unit: 2 Repair/Replacement I  |                   | SME SECTIONATA-0186                    | IX NC                             |
| 3. Work Performed by: Address: 2244 Waln                       | ut Grove Avenue, R  |   |                          | MO/CWO: 0412117  Type Code Symbol S Authorization No: Expiration Date:                                | tamp:             | N/A<br>N/A<br>N/A                      |                                   |
| 4. Identification of Sys                                       | stem: Main Steam  |   |                          | Expiration Date:  |                   | N/A                                    |                                   |
| 5. (a) Applicable Cons   | truction Code: ASM  | TE Section III, Cla                     | ss 2, 197                | 4 Edition, Summer 1974  | Adden             | <u>da.</u>                             |                                   |
|  |   | lized for Repair/R                      | eplaceme                 | ent Activity: 1995 Edition  | n, 1990           | 5 Addenda                              |                                   |
| 6. Identification of Cor                                       | nponents:   | ·                                       |                          |   | -                 | Commented                              | Leve                              |
| Name of Component  | Name of Manufacturer  | Manufacturer<br>Serial No.              | National<br>Board<br>No. | Other Identification  | Year<br>Built     | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 6" x 10" Main Steam<br>Safety Valve                            | Crosby Valve &<br>Gage  | N58737-01-0018                          | N/A                      | 2PSV8402  | 1976              | Removed                                | Yes                               |
| 6" x 10" Main Steam<br>Safety Valve                            | Crosby Valve &<br>Gage  | N58737-01-0039                          | N/A                      | RSO-1824-05   | 1984              | Installed                              | Yes                               |
| 1 3/8" x 9" Inlet Studs (12)                                   | Westinghouse  | Ht. #37751, Ht.<br>Code S418            | N/A                      | RSO-1241-05, SA193 B7   | N/A               | Installed                              | No                                |
| 1 3/8"-8 Heavy Hex<br>Nuts (12)                                | Westinghouse  | Ht.<br>#8966364Q8234,<br>Ht. Code S396  | N/A                      | RSO-1241-05, SA194 2H   | N/A               | Installed                              | No                                |
| 7. Description of World  |   | I                                       | J                        |   |                   | <u> </u>                               | <u> </u>                          |
| The main steam safe preventative mainten and testing. The inle | ty valve located in p<br>ance action with a s<br>at bolting was also re<br>and nuts in accordar | pare valve (s/n N5<br>placed. (12) each | 8737-01<br>studs an      | In N58737-01-0018) was a -0039) which had been red d (12) each nuts were rep of the removed valve was | turned<br>laced v | to the vendor<br>with Plasma B         | for rewor                         |
|  |   |   |                          |   |                   |  |                                   |
|  |   |   |                          |   |                   |  |                                   |
| 8. Tests Conducted: Hy   | rdrostatic P  | neumatic   1                            | Nominal C                | Operating Pressure X 1  | Exempt            | Oth                                    | er                                |
| -  | e: AR 051001145-1   | <del></del>                             |                          | ≥ 1001 psi Test T   | _                 |  | <del></del>                       |

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached) CERTIFICATE OF COMPLIANCE 1 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 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/ 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

Date 7/7/06

23 Q.C.-434A Sheet 1 of 2

|     | FORM NVR-1 REPORT OF REPAIR X, 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  |
| 3.  | (name and address) Owner SOUTHERN CALIFORNIA EDISON COMPANY  |
|     | (name)   |
| 4.  | Name, address and identification of nuclear power plant  SAN ONOFRE 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 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 -   |
| 7.  | (edition) (addenda) (Code Case(s)) ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 -                         |
|     | (edition) (addenda) (Code Case(s))  Construction Code used for repairs, modifications, or replacements 1974  S1974                           |
|     | (edition) (addenda) (Code Case(s))  Design responsibilities ANDERSON GREENWOOD CROSBY  |
|     | Opening pressure 1092 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment made at ANDERSON GREENWOOD CROSBY using STEAM   |
| 11  | (location) (test medium)  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  |
| -   |  |
| •   |  |
| -   |  |

234 TO FOLLOW

| CERTIFICATE OF   | COMPLIANCE   |
|--|--|
| replacement of the pressure relief device described above conformation Board Inspection Code "VR" and "NR" rules.  National Board Certificate of Authorization No.  75 to 84  National Board Certificate of Authorization No.  | to use the "VR" stamp expires  JAN. 14,2007  to use the "NR" stamp expires  DEC.11,2006  |
| Date 2919 os , Signed Anderson Greenwood (name of repair organ   | nization) (authorized representative) (title)  |
|  |  |
|  |  |
|  |  |
|  |  |
|  | <u>.</u>   |
|  | ·  |
|  | · · · · · · · · · · · · · · · · · · ·  |
|  |  |
| CERTIFICATE OF   | INSPECTION   |
|  |  |
| I, // / 448, holding a valid commission issued to Inspectors and certificate of competency issued by the jurisdiction  | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by   |
| I, //su / Yes, holding 2 valid commission issued to Inspectors and certificate of competency issued by the jurisdiction HSB-CT   | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have  |
| I, VISU 14EA , holding a valid commission issued to Inspectors and certificate of competency issued by the jurisdiction HSB-CT inspected the repair, modification or replacement described in this   | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have s report on 8-21, 3-25 and state that to the   |
| I, // / 4EA, holding 2 valid commission issued to Inspectors and certificate of competency issued by the jurisdiction HSB-CT   | oy The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have see report on 8-21, 205 and state that to the accement has been completed in accordance with Section XI  |
| I, Usu lue , holding a valid commission issued to Inspectors and certificate of competency issued by the jurisdiction HSB-CT inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement of the ASME Codeand the National Board Inspection Code "VR" By signing this certificate, neither the undersigned nor my employ  | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have see report on R-22 , Fact and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning  |
| Inspectors and certificate of competency issued by the jurisdiction HSB-CT inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement Code "VR" By signing this certificate, neither the undersigned nor my employ the repair, modification or replacement described in this report.  | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have be report on R-21, 2007 and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning Furthermore, neither the undersigned nor my employer shall |
| Inspectors and certificate of competency issued by the jurisdiction HSB-CT  inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement the ASME Codeand the National Board Inspection Code "VR" By signing this certificate, neither the undersigned nor my employ the repair, modification or replacement described in this report. It be liable in any manner for any personal injury, property damage    | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have be report on R-21, 2007 and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning Furthermore, neither the undersigned nor my employer shall |
| Inspectors and certificate of competency issued by the jurisdiction HSB-CT inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement Code "VR" By signing this certificate, neither the undersigned nor my employ the repair, modification or replacement described in this report. It be liable in any manner for any personal injury, property damage Inspection.  | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have be report on R-21, 2007 and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning Furthermore, neither the undersigned nor my employer shall |
| Inspectors and certificate of competency issued by the jurisdiction HSB-CT  inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement to the ASME Codeand the National Board Inspection Code "VR" By signing this certificate, neither the undersigned nor my employ the repair, modification or replacement described in this report. It be liable in any manner for any personal injury, property damage | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have be report on R-21, 2007 and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning Furthermore, neither the undersigned nor my employer shall |
| Inspectors and certificate of competency issued by the jurisdiction HSB-CT  inspected the repair, modification or replacement described in this best of my knowledge and belief, this repair, modification or replacement Code "VR" By signing this certificate, neither the undersigned nor my employ the repair, modification or replacement described in this report. It be liable in any manner for any personal injury, property damage Inspection.  Date  Aug 19, 2005.                  | by The National Board of Boiler and Pressure Vessel of MASSACHUSETTS and employed by of HARTFORD - CT. have be report on R-21, 2007 and state that to the accement has been completed in accordance with Section XI and "NR" rules.  Wer makes any warranty, expressed or implied, concerning Furthermore, neither the undersigned nor my employer shall |

As Required by the Provisions of the ASME Code Section XI

|    |   |                      | As Required by the Provisions of | of the ASME C            | Oue Section A1                  |                        |                |  |                                   |
|----|---|----------------------|----------------------------------|--------------------------|---------------------------------|------------------------|----------------|--|-----------------------------------|
| 1. | Owner: Southern Ca<br>Address: 2244 Waln  |                      |                                  | ia 9177(                 | )                               | 07/06/06               |                | Sheet                                  | 1 of 1                            |
| 2. | 2. Plant: San Onofre Nuclear Generating Station Address: P.O. Box 128, San Clemente, California 92674-0128          |                      |                                  | Unit:<br>Repair          | z/Replacement P                 |                        | ASME SECTION   | IX NO                                  |                                   |
| 3  | Work Performed by   | · Southern Californ  | ia Edison Compan                 | v                        | MO/C                            | CWO: 0412122           | 3000           |  |                                   |
| ٥. | Work Performed by: Southern California Edison Company Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |                      |                                  |                          | Code Symbol St<br>orization No: | -                      | N/A<br>N/A     |  |                                   |
| 4. | . Identification of System: Main Steam  |                      |                                  | Expira                   | ation Date:                     | 7                      | N/A            |  |                                   |
| 5. | (a) Applicable Const  | truction Code: ASM   | 1E Section III, Cla              | ss 2, 197                | 4 Edition,                      | Summer 1974 /          | <u>Adden</u>   | <u>da.</u>                             |                                   |
| 6. | (b) Applicable Edition  |                      | llized for Repair/Re             | eplaceme                 | ent Activity                    | y: <u>1995 Editior</u> | <u>1, 1996</u> | 5 Addenda                              |                                   |
|    | Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No.       | National<br>Board<br>No. | Other !                         | Identification         | Year<br>Built  | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 6  | " x 10" Main Steam  | Crosby Valve &       | N58737-01-0005                   | N/A                      | 2PSV8404                        | 4                      | 1976           | Removed                                | Yes                               |

| Name of Component                   | Name of Manufacturer   | Serial No.                             | Board<br>No. | Other identification . | Built | Installed | Stamped<br>Yes/No |
|-------------------------------------|------------------------|--|--------------|------------------------|-------|-----------|-------------------|
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0005                         | N/A          | 2PSV8404               | 1976  | Removed   | Yes               |
| 6" x 10".Main Steam<br>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.<br>Code S418           | N/A          | RSO-1241-05, SA193 B7  | N/A   | Installed | No                |
| 1 3/8"-8 Heavy Hex<br>Nuts (12)     | Westinghouse           | Ht.<br>#8966364Q8234,<br>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).

|    | ·                |                  |              |                            |                |       |  |
|----|------------------|------------------|--------------|----------------------------|----------------|-------|--|
| 3. | Tests Conducted: | Hydrostatic      | Pneumatic    | Nominal Operating Pressure | Exempt         | Other |  |
|    |                  | See: AR 05100114 | <u>15-10</u> | Pressure: ≥ 1001 psi       | Test Temp: N/A | °F    |  |

# FORM NIS-2 (back)

| reports to be attached)   |
|---|
| COMPLIANCE  |
| d that this conforms to the requirements of the ASME  |
|   |
| Expiration Date: N/A  |
| sing ASME Codes Engineer Date: 2/6/06   |
| SERVICE INSPECTION  |
| e National Board of Boiler and Pressure Vessel Inspectors and BCT of Hartford, Connecticnt have inspected the component of 19/05 to 17/7/06, and state that to med examinations and taken corrective measures described in the ASME Code, Section XI. |
| oloyer makes any warranty, expressed or implied, concerning<br>Owner's Report. Furthermore, neither the Inspector nor his<br>ury or property damage or a loss of any kind arising from or   |
|   |

15 Q.C.-434A Sheet 1 of 2

|     | FORM NVR-1 REPORT OF REPAIR X, 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  |       |
| 2   | (address) 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 bu  | uilt) |
|     | d. Construction Code ASME III 1974 S1974 — 2  (name/section/division) (edition) (addenda) (Code Case(s)) (Code Clase(s)) | 300)  |
|     |  | 233)  |
| 6.  | ASME Code Section XI applicable for Inservice inspection 1995 1996 —   |       |
| 7   | ASME Code Section XI used for repairs, modifications, or replacements 1995 1996  | (s))  |
| •   | (edition) (addenda) (Code Case   | (s))  |
| 8.  | Construction Code used for repairs, modifications, or replacements 1974 S1974  |       |
| 9.  | Design responsibilities ANDERSON GREENWOOD CROSBY (edition) (addenda) (Code Case   | :(2): |
| 10  | Opening pressure 1106 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment                             |       |
| ıu. | made at ANDERSON GREENWOOD CROSBY using STEAM  |       |
|     | (location) (test medium)   |       |
|     | 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        |       |
|     |  |       |
| ຸ.  | Remarks CAPACITY 834,324 LBS/HR  |       |
| ۷.  | Remarks Controll 1004,024 DD0/IIC  |       |
| •   |  |       |
| •   |  |       |
| •   |  |       |

15A TO FOLLOW

| CERTIFICATE OF COMPLIANCE  |  |
|--|--|
| I, Roya B. Roya Certify that the statements made in this report are correct and the repair, modification of 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 39A.c.s. Signed Anderson Greenwood/Crosby Issur Sr (kAfregines Tox QA MGR. (name of repair organization) (authorized representative) (title)  |  |

| <u>CERTIFICATE</u>  | OF INSPECTION   |        |
|---|---|--------|
| 1, <u>VISH IYES</u> , holding a valid commission issued inspectors and certificate of competency issued by the jurisdiction HSB-CT  | sued by The National Board of Boiler and Pressure Vessel iction of MASSACHUSETTS and employed by of HARTFORD - CT. have |        |
| inspected the repair, modification or replacement described in best of my knowledge and belief, this repair, modification or of the ASME Codeand the National Board Inspection Code. By signing this certificate, neither the undersigned nor my enthe repair, modification or replacement described in this repo | in this report on 8-25,05 and state that to the replacement has been completed in accordance with Section X             | Π<br>; |
| Date Aug 29. 2005. Signed MyRess.   | Commissions MA1420 A, N, I  | :      |
| (Inspector)   | (Nat'l. Bd. (incl. endorsements), and jurisdiction, and n   | 0.)    |

RSO-1824-05-00

As Required by the Provisions of the ASME Code Section XI

| 1. | Owner: Southern California Edison Company  | Date: 07/06/06            | Sheet 1 of 1                 |
|----|--|---------------------------|------------------------------|
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Unit: 2                   |                              |
| 2. | Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128 | Repair/Replacement Plan:  | ASME SECTION XI<br>DATA-0190 |
| _  | WALD COLORS THE C  | MO/CWO: 04121242000       |                              |
| 3. | Work Performed by: Southern California Edison Company  | Type Code Symbol Stamp    | : N/A                        |
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Authorization No:         | N/A                          |
| 4. | Identification of System: Main Steam   | Expiration Date:          | N/A                          |
| 5. | (a) Applicable Construction Code: ASME Section III, Class 2, 1974 E  | Edition, Summer 1974 Adde | enda.                        |

(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<br>Serial No.             | National<br>Board<br>No. | Other Identification  | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------------|------------------------|--|--------------------------|-----------------------|---------------|--|-----------------------------------|
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0013                         | N/A                      | 2PSV8406              | 1976          | Removed                                | Yes                               |
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve & Gage    | N58737-01-0041                         | N/A                      | RSO-1824-05           | 1984          | Installed                              | Yes                               |
| 1 3/8" x 9" Inlet Studs<br>(12)     | Westinghouse           | Ht. #37751, Ht.<br>Code S418           | N/A                      | RSO-1241-05, SA193 B7 | N/A           | Installed                              | No                                |
| 1 3/8"-8 Heavy Hex<br>Nuts (12)     | Westinghouse           | Ht.<br>#8966364Q8234,<br>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 | X Exempt Other   |
|---------------------|--|----------------------------|--|
|                     | See: AR 051001145-10   | Pressure: ≥ 1001 psi       | Test Temp: N/A °F  |
|                     | in the form of lists, sketches, or drawings may be used provi<br>is mumbered and the number of sheets is recorded at the top |                            | tion in Items 1 through 6 on this report is included on each 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 Expiration Date: N/A Certificate of Authorizaton No: N/A Supervising ASME Codes Engineer Date: Signed: 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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>12190s</u> to <u>7 7 06</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions National Board, State, Province, and Endorsements

Q.C.-434A Sheet 1 of 2

|          | FORM NVR-1 REPORT OF REPAIR X, 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   |
| 2.<br>3. |   |
| 4.       | (name)  (address)  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)   |
| 7.<br>8. | ASME Code Section XI applicable for Inservice inspection 1995 1996  (edition) (addenda) (Code Case(s))  ASME Code Section XI used for repairs, modifications, or replacements 1995 1996  (edition) (addenda) (Code Case(s))  Construction Code used for repairs, modifications, or replacements 1974 S1974  (edition) (addenda) (Code Case(s))                              |
| 10.      | Design responsibilities ANDERSON GREENWOOD CROSBY  Opening pressure 1120 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment made at ANDERSON GREENWOOD CROSBY using STEAM   |
|          | (location) (test medium)  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. N58737-01-0041

| CERTIFICATE OF COMPLIANCE   | •  |
|---|--|
| I: Certify that the statements made in this report are correct as replacement of the pressure relief device described above conforms to Section XI of the ASM Board Inspection Code "VR" and "NR" rules.  National Board Certificate of Authorization No. 75 to 84 to use the "VR" stamp exp National Board Certificate of Authorization No. 68 to use the "NR" stamp exp | E Code and the National pires JAN. 14,2007 |
| Date 39 Augusts . Signed Anderson Greenwood/Crosby 15 Crosby (name of repair organization) (authorized representation)  | Sentative) (title)                         |
|   |  |
|   |  |
| CERTIFICATE OF INSPECTION   |  |
| I, USH IYER, holding a valid commission issued by The National Board of Board of Board of Board of Board of Board of Enspectors and certificate of competency issued by the jurisdiction of MASSACHUSE HSB-CT of HARTFOLD   | RD - CT. have                              |
| inspected the repair, modification or replacement described in this report on Seas best of my knowledge and belief, this repair, modification or replacement has been completed of the ASME Codeand the National Board Inspection Code "VR" and "NR" rules.   | n accordance with Section XI               |
| By signing this certificate, neither the undersigned nor my employer makes any warranty, expression, modification or replacement described in this report. Furthermore, neither the undersigned in this report.   | ersigned nor my employer shall             |
| By signing this certificate, neither the undersigned nor my employer makes any warranty, expr   | ersigned nor my employer shall             |
| By signing this certificate, neither the undersigned nor my employer makes any warranty, expression the repair, modification or replacement described in this report. Furthermore, neither the under the liable in any manner for any personal injury, property damage or loss of any kind arising fruspection.  Date  Aug 39, 3005  Signed  Commissions                  | ersigned nor my employer shall             |

RSO -1824-05-00

As Required by the Provisions of the ASME Code Section XI

| . Owner: Southern Ca<br>Address: 2244 Walnu                              |  |   | ia 91 <i>77(</i>         | Date: 07/06/06   |                  | Shee                                   | 1 of 1                            |
|--|--|---|--------------------------|--|------------------|--|-----------------------------------|
|  | ·  | ·                                       | >1//                     | Omi: 2   |                  |  |                                   |
| . Plant: San Onofre 3<br>Address: P.O. Box 12                            | Nuclear Generating<br>28, San Clemente, C  |   | 128                      | Repair/Replacement F   |                  | SME SECTI<br>DATA-0191                 | ON XI                             |
|  |  |   |                          | MO/CWO: 0412125  | 1000             |  |                                   |
| . Work Performed by:<br>Address: 2244 Walnu                              |  |   |                          | Type Code Symbol So<br>Authorization No:   | _                | N/A<br>N/A                             |                                   |
| . Identification of Sys  | tem: Main Steam  | ł                                       |                          | Expiration Date:   | •                | N/A                                    |                                   |
| . (a) Applicable Const   | ruction Code: ASM  | IE Section III, Cla                     | ss 2, 197                | 4 Edition, Summer 1974 A   | Adden            | da.                                    |                                   |
| (b) Applicable Editio  | n of Section XI Uti  | lized for Repair/R                      | eplaceme                 | ent Activity: 1995 Edition   | ı <u>, 199</u> 6 | 5 Addenda                              |                                   |
| . Identification of Con  | nponents:  | •                                       |                          |  |                  |  |                                   |
| Name of Component  | Name of Manufacturer   | Manufacturer<br>Serial No.              | National<br>Board<br>No. | Other Identification   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 6" x 10" Main Steam<br>Safety Valve                                      | Crosby Valve &<br>Gage   | N58737-01-0008                          | N/A                      | 2PSV8407   | 1976             | Removed                                | Yes                               |
| 6" x 10" Main Steam<br>Safety Valve                                      | Crosby Valve &<br>Gage   | N58737-01-0040                          | N/A                      | RSO-1824-05  | 1984             | Installed                              | Yes                               |
| 1 3/8" x 9" Inlet Studs<br>(12)  | Westinghouse   | Ht. #37751, Ht.<br>Code S418            | N/A                      | RSO-1241-05, SA193 B7  | N/A              | Installed                              | No                                |
| 1 3/8"-8 Heavy Hex<br>Nuts (12)  | Westinghouse   | Ht.<br>#8966364Q8234,<br>Ht. Code S396  | N/A                      | RSO-1241-05, SA194 2H  | N/A              | Installed                              | No                                |
| 7. Description of Work   | •  |   | <u> </u>                 | I  | 1                | J                                      | <u>.l.</u>                        |
| The main steam safety<br>preventative maintena<br>and testing. The inlet | y valve located in p<br>ance action with a s<br>bolting was also re<br>and nuts in accordar  | pare valve (s/n N5<br>placed. (12) each | 8737-01-<br>studs an     | in N58737-01-0008) was re-0040) which had been ret d (12) each nuts were repl. The removed valve was | urned<br>aced v  | to the vendor<br>vith Plasma B         | for rewo                          |
| 8. Tests Conducted: Hyd<br>See   | Postatic Pos | <del></del> -                           |                          | operating Pressure X E<br>≥ 1001 psi Test Te   | Exempt           |  | er                                |

## 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 Supervising ASME Codes Engineer Date: Signed: 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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> have inspected the components to \_, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions California National Board, State, Province, and Endorsements

| =        | FORM NVR-1 REPORT OF REPAIR X, 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  |
| 2.<br>3. | (address)  Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  (name and address)  Owner SOUTHERN CALIFORNIA EDISON COMPANY   |
| 4.       | (name)  (address)  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  d. Construction Code ASME III 1974 S1974 - 2  (name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)   |
| 7.<br>8. | ASME Code Section XI applicable for Inservice inspection 1995 1996 —  (edition) (addenda) (Code Case(s))  ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 —  (code Case(s))  Construction Code used for repairs, modifications, or replacements 1974 S1974 ——  (edition) (addenda) (Code Case(s))  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)  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 |
| -        | Remarks CAPACITY 849,964 LBS/HR  |
| · -      |  |

47 A TO FOLLOW

| CERTIFICAT  | E OF COMPLIA  | NCE  |  |
|---|---|--|--|
| replacement of the pressure relief device described above Board Inspection Code "VR" and "NR" rules.  | conforms to Section   | XI of the ASME Code  |  |
|   |   |  | JAN. 14,2007<br>DEC.11 ,2006   |
| Date 29 August 25, Signed Anderson Green  | eenwood/Crosby /air organization) (a  | ACH S. OH English  | Ve) / KILQA MGR. (title)   |
|   |   |  |  |
| · · · · · · · · · · · · · · · · · ·   |   |  |  |
|   |   |  |  |
|   |   |  |  |
| <u>CERTIFICAT</u>   | E OF INSPECTI   | <u> </u>   |  |
| 11 ~  |   |  |  |
| 1, Wich 14ER, holding a valid commission  | issued by The Nation  | al Board of Boiler and   | Pressure Vessel  |
| I, Wish I YEA , holding a valid commission Inspectors and certificate of competency issued by the juri HSB-CT   | OI  | HARIFORD - C   | .i. nave   |
| inspected the repair, modification or replacement describe best of my knowledge and belief, this repair, modification   | d in this report on or replacement has b  | F-22, OS<br>been completed in acco   | and state that to the  |
| inspected the repair, modification or replacement describe best of my knowledge and belief, this repair, modification of the ASME Codeand the National Board Inspection Code By signing this certificate, neither the undersigned nor my the repair, modification or replacement described in this re-  | d in this report on or replacement has be "VR" and "NR" rule employer makes any eport. Furthermore,                         | been completed in accordes.  warranty, expressed on neither the undersigne   | and state that to the ordance with Section XI or implied, concerning d nor my employer shall |
| inspected the repair, modification or replacement describe best of my knowledge and belief, this repair, modification of the ASME Codeand the National Board Inspection Code By signing this certificate, neither the undersigned nor my  | d in this report on or replacement has be "VR" and "NR" rule employer makes any eport. Furthermore,                         | been completed in accordes.  warranty, expressed on neither the undersigne   | and state that to the ordance with Section XI or implied, concerning d nor my employer shall |
| inspected the repair, modification or replacement describe best of my knowledge and belief, this repair, modification of the ASME Codeand the National Board Inspection Code By signing this certificate, neither the undersigned nor my the repair, modification or replacement described in this rebe liable in any manner for any personal injury, property of             | d in this report on or replacement has be "VR" and "NR" rule employer makes any eport. Furthermore,                         | been completed in accordes.  warranty, expressed on neither the undersigne   | and state that to the ordance with Section XI or implied, concerning d nor my employer shall |
| inspected the repair, modification or replacement describe best of my knowledge and belief, this repair, modification of the ASME Codeand the National Board Inspection Cod. By signing this certificate, neither the undersigned nor my the repair, modification or replacement described in this rebe liable in any manner for any personal injury, property of Inspection. | of d in this report on or replacement has be "VR" and "NR" rul employer makes any eport. Furthermore, damage or loss of any | harrord - C  5-22, 05 been completed in accordes.  warranty, expressed of neither the undersigner with arising from or the management of t | and state that to the ordance with Section XI or implied, concerning d nor my employer shall |

RS0-1824-05-00

47A

Carponyment TON TRANSPORTS IN THE Commence of the com-

As Required by the Provisions of the ASME Code Section XI

| 1. | Owner: Southern California Edison Company  | Date: 07/06/06 Sheet 1 c                          | <b>،۲</b> 1 |  |  |  |
|----|--|---|-------------|--|--|--|
|    | Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  | Unit: 2   |             |  |  |  |
| 2. | Plant: San Onofre Nuclear Generating Station<br>Address: P.O. Box 128, San Clemente, California 92674-0128             | Repair/Replacement Plan: ASME SECTION DATA-0191   | ΙXΙ         |  |  |  |
|    |  | MO/CWO: 04121321000                               |             |  |  |  |
| 3. | Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 | Type Code Symbol Stamp: N/A Authorization No: N/A |             |  |  |  |
| 4. | Identification of System: Main Steam   | Expiration Date: N/A                              |             |  |  |  |

- 5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda.
  - (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1995 Edition, 1996 Addenda

#### 6. Identification of Components:

| Name of Component                   | Name of Manufacturer   | Manufacturer<br>Serial No.             | National<br>Board<br>No. | Other Identification  | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------------|------------------------|--|--------------------------|-----------------------|---------------|--|-----------------------------------|
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0012                         | N/A                      | 2PSV8416              | 1976          | Removed                                | Yes                               |
| 6" x 10" Main Steam<br>Safety Valve | Crosby Valve &<br>Gage | N58737-01-0035                         | N/A                      | RSO-1824-05           | 1984          | Installed                              | Yes                               |
| 1 3/8" x 9" Inlet Studs<br>(12)     | Westinghouse           | Ht. #37751, Ht.<br>Code S418           | N/A                      | RSO-1241-05, SA193 B7 | N/A           | Installed                              | No                                |
| 1 3/8"-8 Heavy Hex<br>Nuts (12)     | Westinghouse           | Ht.<br>#8966364Q8234,<br>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 X   | Exempt  | Other                               |           |
|---|---|---|--|--|---|-------------------------------------|-----------|
|   | See: AR 05100114  | <u>15-11</u>  | Pressure: $\geq 1001$  | psi Tes  | t Temp: N/A                                       | ° <sub>F</sub>                      |           |
| Note: Supplemental sheets sheet, (3) each sheet i | in the form of lists, sketches, or<br>is numbered and the number of | drawings may be used provi<br>sheets is recorded at the top | ded (1) size is 8 1/2 in. x 11 in of this form, and (4) each sheet | ., (2) information in It<br>t is initialed and dated | tems 1 through 6 on this to by the Owner or Owner | report is include<br>s designee and | d on each |

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 Supervising ASME Codes Engineer Date: Signed: 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 to \_, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. California Commissions National Board, State, Province, and Endorsements Inspector's Signature

|               | FORM NVR-1 REPORT OF REPAIR X, 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   |
| 2.            | (address)  Work performed for SOUTHERN CALIFORNIA EDISON COMPANY  (name and address)  Owner SOUTHERN CALIFORNIA EDISON COMPANY  |
| 4.            | (name)  (address)  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  d. Construction Code ASME III 1974 S1974 - 2  (name/section/division) (edition) (addenda) (Code Case(s)) (Code Class)  |
| 7.            | ASME Code Section XI applicable for Inservice inspection 1995 1996 —  (edition) (addenda) (Code Case(s))  ASME Code Section XI used for repairs, modifications, or replacements 1995 1996 —  (edition) (addenda) (Code Case(s))  Construction Code used for repairs, modifications, or replacements 1974 S1974 ——   |
|               | Design responsibilities ANDERSON GREENWOOD CROSBY (edition) (addenda) (Code Case(s))  |
|               | Opening pressure 1127 PSIG Blowdown (if applicable) 3 % Set pressure and blowdown adjustment made at ANDERSON GREENWOOD CROSBY using STEAM  |
|               | (location) (test medium)  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 |
| -<br>12.<br>- | Remarks CAPACITY 849,964 LBS/HR   |
| -             |   |

55 A TO FOLLOW

| 1.   |
|--|
| CERTIFICATE OF INSPECTION  |
|  |
|  |
|  |
|  |
| I, VISH 19EK, holding a valid commission issued by The National Board of Boiler and Pressure Vessel  |
| HSB-CI of HARTFORD - CT. have  |
| inspected the repair, modification or replacement described in this report on $6-24$ , 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 Codeand 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.  |
| 1  |
| Signed Commissions MA1420 A, N, I  (Inspector) (Nat'l. Bd. (incl. endorsements), and jurisdiction, and no.)  |

RS0-1824-05-00

55 A

As Required by the Provisions of the ASME Code Section XI

| Owner: Southern Ca     Address: 2244 Walnu  |   |  | ia 91770   | 3   | 01/12/06  |                    | Shee   | tlofl                             |
|---|---|--|--|---|---|--------------------|--|-----------------------------------|
| 2. Plant: San Onofre Address: P.O. Box 12   | Nuclear Generating  | Station  |  | Unit:   | 2<br>/Replacement                                 | Plan: 0            | 41100199-11                                    |                                   |
| 3. Work Performed by:<br>Address: 2244 Walnu  |   |  | -  | Type C  | WO: 050104<br>Code Symbol :<br>rization No:       | Stamp: 1           | N/A<br>N/A                                     |                                   |
| 4. Identification of Sys  | tem: Chemical and   | Volume Control   |  |   | tion Date:  | -                  | N/A  |                                   |
| 5. (a) Applicable Consti  |   | ME Section III, Cla<br>ion III, Class 2, 19  |  |   |   |                    |  |                                   |
| (b) Applicable Edition  | on of Section XI Uti  | ilized for Repair/R  | eplaceme   | ent Activity  | : <u>1995 Edition N-416-2</u>                     | on, 1996           | Addenda; C                                     | ode Case                          |
| 6. Identification of Com  | ponents:  |  |  |   |   |                    |  |                                   |
| Name of Component   | Name of Manufacturer  | Manufacturer<br>Serial No.   | National<br>Board<br>No.   | Other I   | dentification                                     | Year<br>Built      | Corrected,<br>Removed, or<br>Installed         | ASME<br>Code<br>Stamped<br>Yes/No |
| 2" 1500# Y-Type Check<br>Valve  | Kerotest  | MA8-14   | N/A  | S21208MU  | J017  | 1976               | Removed  | Yes                               |
| 2" 1513# Y-Type Check<br>Valve  | Flowserve   | 98AXD  | N/A  | RSO-1974  | -03   | 2003               | Installed                                      | Yes                               |
| 7. Description of Work Replaced the Charging accordance with Repa prepared by removal of valve ends were exam joint was seal welded body-to-bonnet seal w | g Pump (MP192) d<br>iir Replacement Pla<br>of the land such tha<br>iined prior to valve<br>. Replacement valv | on 041100199. Print the resultant weld installation (2PT-free installed in according to the contract of the co | or to insident ends had only on the contract of the contract o | tallation, the tive a bevel a nd 2PT-002 with weld re | e replacement<br>angle of 35 to<br>2-05). In addi | valve h<br>40 degi | ad the weld e<br>rees. The pre<br>valve body-t | ends<br>pared<br>to-bonnet        |
| Note: NPV-1 report t  | for replacement val   | ve has a typo for d  | lwg. No.:  | 87360 s/b   | 83760.  |                    |  |                                   |
| 8. Tests Conducted: Hyd   | Irostatic P   | neumatic 1   | Nominal C  | perating Pre  | essure X  | Exempt             | Oth  | er [                              |

Pressure: ≥=2335 psi

Test Temp: NOT

See: AR 041100199-15

# FORM NIS-2 (back)

|   | (Applicable Manufacturer's Data Reports to be attached)   |
|---|---|
|   | CERTIFICATE OF COMPLIANCE   |
| I certify that the statements made in th Code, Section XI.  | ne report are correct and that this conforms to the requirements of the ASME  |
| Type Code Symbol Stamp: N/A   |   |
| Certificate of Authorizaton No: N/A   | Expiration Date: N/A  |
| Signed: Owner or Owner's Designee,  | Supervising ASME Codes Engineer Date: Z-/3-0C Title   |
|   | CERTIFICATE OF INSERVICE INSPECTION   |
| the State or Province of <u>California</u> , described in this Owner's Report during the best of my knowledge and belief, | mmission issued by the National Board of Boiler and Pressure Vessel Inspectors an and employed by HSBCT of Hartford, Connecticut have inspected the component of the period |
|   | e Inspector nor his employer makes any warranty, expressed or implied, concerning sures described in this Owner's Report. Furthermore, neither the Inspector nor his        |

As Required by the Provisions of the ASME Code Section XI

| Address: 2244 Waln  2. Plant: San Onofre Address: P.O. Box 1  3. Work Performed by: Address: 2244 Waln  4. Identification of Sys | wner: Southern California Edison Company Idress: 2244 Walnut Grove Avenue, Rosemead, California 91770  ant: San Onofre Nuclear Generating Station Idress: P.O. Box 128, San Clemente, California 92674-0128  ork Performed by: Southern California Edison Company Idress: 2244 Walnut Grove Avenue, Rosemead, California 91770  entification of System: Fire Protection (Water)  Applicable Construction Code: ASME Section III, Class 2, 1971 I |                            |                          | Expiration Date: N/A  N/A              |               |  |                                   |
|--|--|----------------------------|--------------------------|--|---------------|--|-----------------------------------|
| (b) Applicable Edition   | on of Section XI Uti   | ilized for Repair/R        | eplaceme                 | ent Activity: 1995 Edition             | on, 1996      | 5 Addenda                              |                                   |
| 6. Identification of Cor   | nponents:  |                            |                          |  |               |  |                                   |
| Name of Component  | Name of Manufacturer   | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 4" 150# Swing Check<br>Valve   | Anchor/Darling   | EB734-1-1                  | N/A                      | SA2301MU061                            | 1991          | ***                                    | Yes                               |
| Disc   | Anchor/Darling   | S/N 7, Ht. Code<br>A636    | N/A                      | RSO-3225-92, SA105<br>Stellite         | 1992          | Installed                              | Yes                               |
| ASME XI Data Flag  | the valve located in - 0338.   |                            |                          | 061 with an in-kind repla              |               |  |                                   |
|  | e: AR 051001145-0  |                            | Nominal C<br>ressure:    | Operating Pressure $X$ ≥ 60 psi Test ' | Exempt  Temp: | _                                      | er                                |

| (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: C./22/oC  Owner or Owner's Designee, Title   |
|  |
| 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 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.  Commissions  Inspector's Signature  Commissions  National Board, State, Province, and Endorsements |
| Date 11 25, 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

Sheet 1 of 2

Unit:

2. Plant: San Onofre Nuclear Generating Station

Address: P.O. Box 128, San Clemente, CA 92672-0128

3. Work Performed by: Welding Services, Inc.

Address: 2225 Skyland Court, Norcross, GA 30071

4. Identification of System: Reactor Coolant System (1201)

Repair/Replacement Plans:

Date: 6/20/2006

(a) 007-05 (Temper Bead Pad)

(b) 008-05 (Sleeve Installation)

(c) 009a-05 (Heater Removal/Refurb.)

(d) 009b-05 (Heater Installation)

MO/CWO: 05020382000, 05071578000

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

**Expiration Date:** 

N/A N/A

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<br>Component | Name of<br>Manufacturer   | Manufacturer<br>Serial No. | National<br>Board No. | Other<br>Identification | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|----------------------|---------------------------|----------------------------|-----------------------|-------------------------|---------------|--|-----------------------------------|
| Pressurizer Vessel   | Combustion<br>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:** 

SO23-919-13

NOTE:

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

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

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

### FORM NIS-2 (back)

- 9. Remarks: 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: LUNGS A Title

Date:  $\mathcal{E}/i\mathcal{E}_{,200}$ 

Owner or Owner's Designee, Title

#### CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>CT</u> have inspected the components described in this Owner's Report during the period <u>I/II/O6</u> to <u>6/26/06</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Commissions California 1574 N & I

Inspector's Signature

(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

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: Welding Services, Inc. Address: 2225 Skyland Court, Norcross, GA 30071

4. Identification of System: Reactor Coolant System Date: 6/20/2006

Unit: 2

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)

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<br>Component  | Name of<br>Manufacturer   | Manufacturer<br>Serial No. | National<br>Board No. | Other<br>Identification | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-----------------------|---------------------------|----------------------------|-----------------------|-------------------------|---------------|--|-----------------------------------|
| Pressurizer<br>Vessel | Combustion<br>Engineering | CE 70602                   | 21495                 | S21201ME087             | 1976          | See Description of Work below          | Yes                               |

PLANT EOUIPMENT/REPAIR DOCUMENT CROSS REFERENCE Pen Sleeve S/N Heater ID Heater Heater Pen Sleeve S/N Heater ID Heater Heater (note 7) S21201-S/N RSO No (note 7) S21201-S/N RSO No No No 05051906 ME616 05051882 ME604 220 A1 213 0053-06 E2 0053-06 A2 05051901 ME617 0053-06 05051883 241 216 F1 ME626 0053-06 05051905 ME615 222 05051884 229 A3 0053-06 F2 ME628 0053-06 A4 05051903 ME614 F3 05051885 ME605 243 0053-06 note 1 capped 245 **B**1 05051904 ME621 205 0053-06 F4 05051892 ME603 0053-06 B<sub>2</sub> 05051899 ME610 003 note 2 G1 05051893 ME618 209 0053-06 C1 05051898 ME620 215 0053-06 G2 05051870 **ME624** 037 note 5 C<sub>2</sub> 05051891 ME622 219 0053-06 G3 05051871 ME613 246 0053-06 **C3** 234 05051894 ME611 217 0053-06 G4 05051872 ME607 0053-06 016 C4 05051896 ME609 210 0053-06 H1 05051876 ME625 note 6 208 218 D1 05051887 ME619 0053-06 H2 05051877 ME629 0053-06 D205051886 ME623 027 note 3 H3 05051878 ME606 233 0053-06 204 D305051888 ME612 221 0053-06 H4 05051875 ME602 0053-06 201 D4 05051890 ME608 030 note 4 J1 05051880 ME630 0053-06 ME627 227 0053-06 05051881 ME601 212. E1 05051889 J2 0053-06

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

As Required by the Provisions of the ASME Code Section XI

| Owner: Southern California Edison Company     Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |                      |   |                          | Date: 02/28/06  |               | Sheet 1 of 1                           |                                   |
|---|----------------------|---|--------------------------|---|---------------|--|-----------------------------------|
| 2. Plant: San Onofre Address: P.O. Box 1  | Repair/Replacement I | Unit: 2 Repair/Replacement Plan: 031100614-91 |                          |   |               |  |                                   |
| <ol><li>Work Performed by:<br/>Address: 2244 Waln</li></ol>   |                      |   |                          | MO/CWO: 0502060  Type Code Symbol S Authorization No: | tamp:         | N/A<br>N/A                             |                                   |
| 4. Identification of Sys  | stem: Reactor Cool   | ant   |                          | Expiration Date:                                      | •             | N/A                                    |                                   |
| 5. (a) Applicable Cons  | truction Code: ASN   | ME Section III, NB                            | (Class 1                 | ), 1971 Edition, Summer                               | 1971 A        | <u>addenda.</u>                        |                                   |
| <ul><li>(b) Applicable Edition</li><li>6. Identification of Cor</li></ul>                                   |                      | lized for Repair/R                            | eplaceme                 | ent Activity: 1995 Edition                            | 1, 1996       | 5 Addenda                              |                                   |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No.                    | National<br>Board<br>No. | Other Identification                                  | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Steam Generator   | CE                   | 71270-1                                       | 22218                    | S21301ME089P  | 1976          | Corrected                              | Yes                               |
| MNSA Clamp for<br>Nozzles   | SCE                  | 2PDT0978-1, -2                                | N/A                      | UNIT 2 MNSA CLAMPS                                    | N/A           | Removed                                | · No                              |
| 7. Description of Work Removed and scrapp   |                      | clamps on Primary                             | instrume                 | ent nozzles 2PDT-0978-1                               | and 2P        | DT-0978-2.                             |                                   |
| • .   |                      |   |                          |   |               |  |                                   |
| 8. Tests Conducted: Hy  | drostatic P          |   | Nominal C                |   | Exempt        |  | er []                             |

9. Remarks: None.

| (Applicable Manufacturar's Data Reports to be attached)  | <del></del> |
|--|-------------|
| CERTIFICATE OF COMPLIANCE  | <del></del> |
| 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: 3/3/6C 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 the State or Province of California, and employed by HSBCT of Hartford, Connecticut have inspected the comport described in this Owner's Report during the period 11/28/05 to 715/06, and state that                                    | nents       |
| the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  | d in        |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concern 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 connected with this inspection. | is          |
| Inspector's Signature Commissions 1574 California NET National Board, State, Province, and Endorsements  |             |
| Date 1219 5, 2006  |             |

engagygen (1000) The State of the Committee Co

As Required by the Provisions of the ASML Code Section XI

| 1.                     | Owner: Southern California Edison Company Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770 |  |  |                       |            |                         | Date: 07/29/05 Sheet 1 of 1                 |  |                                |  |  |
|------------------------|---|--|--|-----------------------|------------|-------------------------|---|--|--------------------------------|--|--|
| 2.                     |   | unt: San Onofre Nuclear Generating Station dress: P.O. Box 128. San Clemente, CA 92672-0128 Repair/Replacement |  |                       |            |                         | placement                                   | Plan: ASME X1 D                        | Pata - 0175                    |  |  |
| 3.                     | Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770   |  |  |                       |            |                         | MO/CWO: 05021560  Type Code Symbol StampN/A |  |                                |  |  |
| 4.                     | Identificat   | tion of System: F  | Reactor Coolant Syst                         | em (1201/BBI          | Bı         | Authoriza<br>Expiration | tion No:                                    | N/A<br>N/A                             |                                |  |  |
| <ol> <li>6.</li> </ol> | (h) A   |  | ruction Code: ASM n of Section XI Util ents: |                       |            |                         |   |  |                                |  |  |
| 1                      | nme of  | Name of<br>Manufacturer  | Manufacturer<br>Serial No.                   | National<br>Board No. | lde        | Other<br>entification   | Year<br>Built                               | Corrected,<br>Removed, or<br>Installed | ASME Code<br>Stamped<br>Yes/No |  |  |
| 4" 2500<br>Control     |   | Hammel-Dahl<br>Conflow   | 74/5797/001                                  | N/A                   | <u>2</u> P | V0100A                  | 1978  | Corrected                              | Yes                            |  |  |
| Upper I<br>Bellows     | Sonnet<br>Assembly  | Anchor/Darling   | EZ749-2-2                                    | N/A                   | RSO        | D-0564-97               | 1997  | Installed                              | Yes                            |  |  |
| Valve P                | lug   | Anchor/Darling   | Serial No. 12<br>Ht. No. 710436              | N/A                   | RSO        | D-0564-97               | 1997  | Installed                              | Yes                            |  |  |

#### 7. Description of Work:

Allied Nut &

Bolt Co.

Ht. No. 25029-6

I-1/8" X 5-3/8"

Upper Bonnet

Studs

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.

N/A

RSO-0564-97

1996

Installed

No

| 8. | Tests Conducted: | Hydrostatic: | Pneumatic:   | Nominal Operat | ing Pressure: X | Exempt:Other: |
|----|------------------|--------------|--------------|----------------|-----------------|---------------|
|    | Pressure: 2250   | psia         | Test Temp: ≥ | 280 °F         |                 |               |

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:

Owner of Owner's Designee, Title

#### CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by 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

Commissions California 1862, NB 8024, 1, N, NS (National Board, State, Province, and Endorsements)

| 1. Owner: Southern Co<br>Address: 2244 Waln |  |  | ia 9177(                 | Date: 06/23/06   |               | Shee                                     | 1 of 1                            |
|---|--|--|--------------------------|--|---------------|--|-----------------------------------|
|   | ·  | •                                      | Ju 71//                  | Unit: 2  | <b>5</b> 1 4  | 0  | 03 1 777                          |
| 2. Plant: San Onofre Address: P.O. Box 1    | Nuclear Generating<br>28, San Clemente, C                        |  | )128                     | Repair/Replacement   | I             | NSME SECTI<br>DATA-0489,<br>040901363-18 |                                   |
|   |  |  |                          | MO/CWO: 0502198  | 32000         |  | •                                 |
| 3. Work Performed by                        |  |  | _                        | Type Code Symbol S   | Stamp:        | N/A                                      |                                   |
| Address: 2244 Walr                          | iut Grove Avenue, K  | osemead, Californ                      | na 91//                  | Authorization No:  |               | N/A                                      |                                   |
| 4. Identification of Sys                    | stem: Chemical and   | l Volume Control                       |                          | Expiration Date:   |               | N/A                                      |                                   |
| 5. (a) Applicable Cons                      | truction Code: ASN   | ME Section III, Cla                    | ss 2, 197                | 4 Edition, No Addenda &  | <u>Speci</u>  | fication SO23                            | <u>-926-1</u>                     |
| (b) Applicable Editi                        | on of Section XI Uti   | ilized for Repair/R                    | eplaceme                 | ent Activity: 1995 Edition   | n, 1990       | 6 Addenda                                |                                   |
| 6. Identification of Co                     | mponents:  |  |                          |  |               |  |                                   |
| Name of Component                           | Name of Manufacturer   | Manufacturer<br>Serial No.             | National<br>Board<br>No. | Other Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed   | ASME<br>Code<br>Stamped<br>Yes/No |
| Letdown Heat<br>Exchanger                   | AMETEC/WHITL<br>OCK  | 78826                                  | 10781                    | -S21208ME062   | 1977          | Corrected                                | Yes                               |
| 1"-8 x 36" All-Thread<br>Stud               | Mackson, Inc   | Ht. #G9316                             | N/A                      | RSO-1278-05, SA564 tp<br>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                                |
| Note: Material for th                       | Channel Head Cove<br>e channel head nuts<br>ansferred to the cut | remains unchange<br>pieces in accordan | d. (28) o                | n accordance with ECP 0-<br>each studs were cut from a<br>RRP GEN-239. (56) nuts | all-thre      | ad stock with                            | the                               |
| 8. Tests Conducted: Hy                      | vdrostatic P   | neumatic 1                             | Nominal (                | Operating Pressure X   | Exempt        | . Coth                                   | er :                              |
|   | e: AR 040901363-   |  |                          |  | Cemp:         |  |                                   |
| <u> </u>                                    | C. AR 040701303-   | <u>12</u> P                            | ressure:                 | = 312 psi 1est 1   | emp.          | IVA I                                    |                                   |

|  | -004-03 reconciles the replacement studs which were certified to ASME III-2(NC), 1989 Ed., No., RoR-003-03 reconciles the replacement nuts which were certified to ASME III-2(NC), 1989 Ed., Add.  |
|--|--|
|  | (Applicable Manufacturer's Data Reports to be attached)  |
|  | CERTIFICATE OF COMPLIANCE  |
| I certify that the st<br>Code, Section XI.   | tatements made in the report are correct and that this conforms to the requirements of the ASME  |
| Type Code Symbo  | ol Stamp: N/A  |
| Certificate of Aut   | horizaton No: N/A Expiration Date: N/A   |
| Signed: Owner or   | Supervising ASME Codes Engineer Date: 7/5/GG r Owner's Designee, Title   |
|  | CERTIFICATE OF INSERVICE INSPECTION  |
| the State or Provi<br>described in this C<br>the best of my kno<br>this Owner's Repo | d holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and ince of California, and employed by HSBCT of Hartford, Connecticut have inspected the component Owner's Report during the period 12/1/05 to 7/6/06, and state that to owledge and belief, the Owner has performed examinations and taken corrective measures described in ort in accordance with the requirements of the ASME Code, Section XI. |
| the examinations   | Shoten Commissions 1574 California NEI   |
| Date July (  | 2,2006   |

| 1. Owner: Southern Ca<br>Address: 2244 Walm   |  |   | ia 9177(                 |              | 07/03/06   |               | Sheet   | 1 of 1                            |  |  |
|---|--|---|--------------------------|--------------|--|---------------|---|-----------------------------------|--|--|
|   | 2. Plant: San Onofre Nuclear Generating Station Address: P.O. Box 128, San Clemente, California 92674-0128 |   |                          |              |  |               | Repair/Replacement Plan: ASME SECTION XI<br>DATA-0105, GEN-23 |                                   |  |  |
| <ul><li>3. Work Performed by:<br/>Address: 2244 Wain</li><li>4. Identification of Sys</li></ul>                 | nut Grove Avenue, R  | osemead, Californ                       | -                        | Type<br>Auth | CWO: 0503032<br>Code Symbol S<br>orization No:<br>ration Date: | tamp:         | N/A<br>N/A<br>N/A   |                                   |  |  |
| 5. (a) Applicable Cons  | truction Code: ASM   | 1E Section III, Cla                     | ıss 2, 197               | 4 Edition    | , Winter 1974 A  | ddenda        | <u>a.</u>   |                                   |  |  |
| (b) Applicable Edition  6. Identification of Con  |  | lized for Repair/R                      | eplaceme                 | ent Activi   | ty: 1995 Edition   | n, 1996       | 5 Addenda   |                                   |  |  |
| Name of Component   | Name of Manufacturer   | Manufacturer<br>Serial No.              | National<br>Board<br>No. | Other        | Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed                        | ASME<br>Code<br>Stamped<br>Yes/No |  |  |
| 10" 150# Butterfly<br>Valve   | Fisher Controls  | BF229048                                | 4057                     | 2HV6223      | 3  | 1978          |   | Yes                               |  |  |
| 7/8" x 36" All-Thread<br>Stud   | Mackson, Inc   | Ht. #736572                             | N/A                      | RSO-231      | 6-05, SA193 B7   | N/A           | Installed   | No                                |  |  |
| 7/8"-9 Heavy Hex Nut  | Nova Machine<br>Products   | Ht. #8861040                            | N/A                      |              | 77-95, SA194 gr.<br>Io. 92-0065)                               | N/A           | Installed   | No                                |  |  |
| 7. Description of Worl Replaced the flange I kind replacements in required markings tra  8. Tests Conducted: Hy | bolting for the valve accordance with AS ansferred to the cut p  | SME XI Data flag-<br>pieces in accordan | 0105. (1                 | 2) each s    | tuds were cut fro  |               | thread materia  |                                   |  |  |
|   | e: AR 050201702-5  |   | ressure:                 | -            | psi Test T   |               |   | u                                 |  |  |

| (Applicable Manufa   | facturer's Data Reports to be attached)   |
|--|---|
| CERTIFIC   | CATE OF COMPLIANCE  |
| I certify that the statements made in the report are c<br>Code, Section XI.                                  | correct and that this conforms to the requirements of the ASME  |
| 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  |
|  |   |
| CERTIFICAT   | TE OF INSERVICE INSPECTION  |
| the State or Province of <u>California</u> , and employed described in this Owner's Report during the period | tued by the National Board of Boiler and Pressure Vessel Inspectors and by HSBCT of Hartford, Connecticut have inspected the components to  |
| the examinations and corrective measures describe  | or his employer makes any warranty, expressed or implied, concerning ed in this Owner's Report. Furthermore, neither the Inspector nor his rsonal injury or property damage or a loss of any kind arising from or |
|  | ommissions 1574 California NAT National Board, State, Province, and Endorsements  |
| Date (1114-6, 2006   |   |

|   | ·   |                            |                          | and the second second   |                 |                          |                           |
|---|---|----------------------------|--------------------------|---|-----------------|--------------------------|---------------------------|
| 1. Owner: Southern C                    | alifornia Edison Con<br>nut Grove Avenue, R |                            | nia 91 <i>77(</i>        | Date: 07/03/06  |                 | Shee                     | t 1 of 1                  |
| Addiess. 2244 Wall                      | nut Grove Avenue, N                         | oscilicad, Camon           | na 91770                 | Unit: 2   |                 |                          |                           |
|   | Nuclear Generating<br>128, San Clemente, C  |                            | 0128                     | Repair/Replacement  |                 | SME SECTI<br>ATA-0105, ( |                           |
| 0 W 1 D C 11                            | 0 1 0 110                                   |                            |                          | MO/CWO: 0503032   | 6000            |                          |                           |
| 3. Work Performed by Address: 2244 Wali | nut Grove Avenue, R                         |                            |                          | Authorization No:   | 1               | N/A                      |                           |
| 4. Identification of Sy                 | stem: Component C                           | Cooling Water              |                          | Expiration Date:  | - 3             | N/A                      |                           |
| 5. (a) Applicable Cons                  | struction Code: ASN                         | ME Section III, Cla        | ass 2, 197               | 4 Edition, Winter 1974 A  | <u>ddenda</u>   | <u>ı.</u>                |                           |
| (b) Applicable Editi                    | ion of Section XI Uti                       | ilized for Repair/R        | eplaceme                 | ent Activity: 1995 Editio   | n <u>, 1996</u> | Addenda                  |                           |
| 6. Identification of Co                 | mponents:                                   |                            |                          |   |                 |                          |                           |
|   | T   | ·                          | 1                        | -   |                 | Corrected,               | ASME                      |
| Name of Component                       | Name of Manufacturer                        | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification  | Year<br>Built   | Removed, or<br>Installed | Code<br>Stamped<br>Yes/No |
| 10" 150# Butterfly                      | Fisher Controls                             | BF229049                   | 4058                     | 2HV6236   | 1978            | •••                      | Yes                       |
| Valve                                   |   |                            |                          |   |                 | :                        |                           |
| 7/8" x 36" All-Thread                   | Modron Inc                                  | Ht. #736572                | N/A                      | RSO-2316-05, SA193 B7   | N/A             | Installed                | No                        |
| Stud                                    | Mackson, Inc                                | Ht. #730372                | N/A                      | KSO-2310-03, SA193 B7   | IN/A            | instaned                 | No                        |
| 7/8"-9 Heavy Hex Nut                    | Nova Machine<br>Products                    | Ht. #8861040               | N/A                      | RSO-0697-95, SA194 gr.<br>7 (SEE No. 92-0065)                             | N/A             | Installed                | No                        |
|   |   | <u> </u>                   | <u> </u>                 |   | l               | <u> </u>                 |                           |
|   | bolting for the valve<br>accordance with AS | SME XI Data flag           | -0105. (1                | 5. Replaced (12) each stud<br>(2) each studs were cut fro<br>RRP GEN-239. |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
|   |   |                            |                          |   |                 |                          |                           |
| 8. Tests Conducted: Hy                  | ydrostatic P                                | neumatic                   | Nominal C                | Operating Pressure X  | Exempt          | Ott                      | ner [                     |
| <u>S</u> e                              | ee: AR 050201702-5                          | <u>52</u> P                | ressure:                 | ≥ 30.5 psi Test T   | emp: 1          | N/A °F                   |                           |

| (Applicable Manufact  | turer's Data Reports to be attached)  |   |
|---|---|---|
| CERTIFICA   | ATE OF COMPLIANCE   |   |
| I certify that the statements made in the report are co Code, Section XI.   | prrect and that this conforms to the  | requirements of the ASME  |
| Type Code Symbol Stamp: N/A   |   |   |
| Certificate of Authorizaton No: N/A   | Expiration Date: N/   | A   |
| Signed: Owner's Designee, Title   | Supervising ASME Codes Enginee  | er Date: 7/6/66   |
|   |   |   |
| CERTIFICATI   | E OF INSERVICE INSPECTION   |   |
| I, the undersigned holding a valid commission issue<br>the State or Province of <u>California</u> , and employed<br>described in this Owner's Report during the period<br>the best of my knowledge and belief, the Owner has<br>this Owner's Report in accordance with the requirem | by HSBCT of Hartford, Connector 12/23/05 to 7/s performed examinations and take | ticut have inspected the components and state that to en corrective measures described in |
| By signing this certificate, neither the Inspector nor<br>the examinations and corrective measures described<br>employer shall be liable in any manner for any pers<br>connected with this inspection.  | in this Owner's Report. Furthern  | nore, neither the Inspector nor his   |
| Inspector's Signature Con   | nmissions 1574 National Board, State,   | California \ \\ \mathbb{E}\ \text{T}  Province, and Endorsements                          |
| Date 11 7 2006  |   |   |

| 1. Owner: Southern C<br>Address: 2244 Wah   |  |                            | nia 9177                 | Date: 05/09/06  Unit: 2              |  | Shee                                   | t 1 of 1                          |
|---|--|----------------------------|--------------------------|--------------------------------------|--|--|-----------------------------------|
|   | e Nuclear Generating<br>128, San Clemente, G | California 92674-          |                          | Repair/Replacement MO/CWO: 0503053   |  | 031100614-92                           |                                   |
| Address: 2244 Wal   |  | •                          | -                        | Type Code Symbol S Authorization No: | -  | N/A<br>N/A                             |                                   |
| 4. Identification of Sy   | stem: Reactor Cool                           | ant                        |                          | Expiration Date:                     |  | N/A                                    |                                   |
| 5. (a) Applicable Cons  | struction Code: ASM                          | ME Section III, NB         | (Class 1                 | ), 1971 Edition, Summer              | <u> 1971                                  </u> | Addenda.                               |                                   |
| (b) Applicable Edition of Control (b) (b) Application of Control (c) (c) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d |  | ilized for Repair/R        | eplaceme                 | ent Activity: <u>1995 Edition</u>    | n, 1996  | 6 Addenda                              |                                   |
| Name of Component   | Name of Manufacturer                         | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                 | Year<br>Built                                  | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>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 Worl  | K:   | <del></del>                |                          | <u> </u>                             | .1   |  | <del></del>                       |
| Removed and scrapp  | ed existing MNSA o                           | clamps on Lower L          | evel Inst                | rument Nozzles 2LT-0110              | 0-1 and  | d 2LT-0110-2                           |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          | •                                    |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
|   |  |                            |                          |                                      |  |  |                                   |
| 8. Tests Conducted: Hyd   | drostatic Pr                                 |                            |                          | perating Pressure E                  |  | _                                      | er                                |
|   |  | . Pr                       | essure: ]                | N/A psi Test Te                      | mp: N  | I/A °F                                 |                                   |

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: Supervising ASME Codes Engineer Date: 5/24/0C 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 component 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.  Commissions  1574 California  The Commissions National Board, State, Province, and Endorsements                                     |
| Date 10/10/0  |

#### 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

Date: 03/21/06

Sheet 1 of 1

2. Plant: San Onofre Nuclear Generating Station

Unit: 2

Repair/Replacement Plan: 002-05

Address: P.O. Box 128, San Clemente, California 92674-0128

MO/CWO: 05050798000

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

4. Identification of System: Reactor Coolant

Expiration Date:

N/A

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<br>No.       | National<br>Board<br>No. | Other Identification         | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|---|-------------------------------|----------------------------------|--------------------------|------------------------------|---------------|--|-----------------------------------|
| Type 2, PZR Lwt Level<br>Half Nozzle Assy | SCE                           | RS-002-02-1                      | N/A                      | 2LT-0110-1                   | N/A           | Installed                              | No                                |
| Type 2, PZR Lwr Level<br>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-<br>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<br>Nipple (2) | Consolidated Power<br>Supply  | Ht. #468373                      | N/A                      | RSO-1611-93                  | N/A           | Installed (1),<br>Spare (1)            | No                                |
| 3/4" 6000# SW Coupling (2)                | Hub Inc.                      | Ht. #HHU                         | N/A                      | RSO-0902-93                  | N/A           | Installed (1),<br>Spare (1)            | No                                |
| 3/4" NPS x 3/8" Tube Flex<br>Hose (2)     | Parker, Metal Bellows<br>Div. | 010 (2LT-0110-1), 011<br>(Spare) | N/A                      | RSO-2939-93                  | 1993          | Installed (1),<br>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 asssembly. 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

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 Authorizaton No: N/A Expiration Date: N/A Signed: Supervising ASME Codes Engineer Date: 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 8/16/15 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 to  $\frac{7}{5}/06$ , and state that to 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 Inspector's Signature National Board, State, Province, and Endorsements

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

| 1.    | Owner: Southern Ca   |   |  | CA 01770  | Date: 3/3/06 Sheet 1  |   |   |  |  |  |
|-------|--|---|--|---|---|---|---|--|--|--|
| _     | Address: 2244 Waln   |   |  | CA 91770  | Unit: 2   |   |   |  |  |  |
| 2.    | Plant: San Onofre l<br>Address: P.O. Box 1   |   |  | Repair/Replacement Plan: RRP 001a-05, RRP 001b-05,  |   |   |   |  |  |  |
| 3.    | Work Performed by Address: 2244 Waln   |   |  |   |   |   | 6 000, 05051870<br>ive), 05051875   |  |  |  |
| 4.    | Identification of Sys  | tem: Reactor (  | Coolant System   |   | 05051878 00<br>05051894 00<br>05051898 00   | 0 (inclus<br>0 (inclus<br>0, 05051                        | ive), 05051880<br>ive), 05051896<br>899 000, 05051<br>5051906 000 (in                           | 000 thru<br>000,<br>901 000,   |  |  |
|       |  |   |  |   | Type Code S   |   |   | //A  |  |  |
|       |  |   |  |   | Authorization I   |   |   | //A<br>//A   |  |  |
| 5.    | (a) Applicable Cons  |   |  |   | , 1971 Edition,   | Summer  |   |  |  |  |
|       | ASME Section III, C  | lass 1, 1989 Ed   | lition, No Adder   | nda, Code C   | ase N-474-1 (m  | aterial)  |   |  |  |  |
|       | (b) Applicable Edit  | ion of Section  | XI Utilized for  | Repairs/Re  | placement Acti  | vity: 199   | 5 Edition; 1996   | Addenda  |  |  |
| 6.    | Identification of Co   | mponents Rep  | aired or Repla   | ced and Rep   | lacement Com  | ponents:  | :   |  |  |  |
|       | Name of<br>Component   | Name of<br>Manufacturer   | Manufacturer<br>Serial No.   | National<br>Board No.   | Other<br>Identification   | Year<br>Built   | Corrected,<br>Removed, or<br>Installed  | ASME<br>Code<br>Stamped<br>Yes/No  |  |  |
|       | Partial Length   | Edison  | See  | N/A   | 027-17841   | N/A   | See   | No No  |  |  |
|       | Pressurizer Heater<br>Sleeves (33 each)  |   | Supplemental Page  |   |   |   | Description of Work below   |  |  |  |
| 7.    | Description of Worl<br>Thirty-three 14" leng<br>N06690 material on 1<br>RSO number (0050-6<br>Specification SO23-4<br>The 33 each, 14" pie<br>for finishing the bore<br>was consumed in sett<br>1490-05) after final 1 | ths of 1-3/4" di<br>M.O. 05051620<br>05-00). The the<br>411-56 and was<br>ces were shipped<br>is using the elec-<br>ting ECM proces | <ol> <li>All of the bar<br/>ermally treated be<br/>certified as me</li> <li>d to a gundrillictro-chemical m</li> </ol> | r stock used value of the stock was eting ASME on the stock was eting as wendor for achining (EC) | was from a come<br>s purchased to the<br>III, NB (Class of<br>the boring (P.O. 6<br>CM) process (P.O. | mon heat<br>ne require<br>l), 1989<br>F655005<br>O. 6F575 | flot (NX4417HI<br>ements of Edisor<br>Edition, No Add<br>i) and then to an<br>i001). One of the | (/13) and note that it is a second and a second a second and a second a second and a second and a second and a second and a second a second and a second and a second and a second a second a second |  |  |
|       | Thirty-one of the 32 individual M.O.s. O final machined satisf acceptance criteria. finished) is being ret   | ne piece was m<br>actorily. The 3<br>The one remair   | ismachined on l<br>0 final machine<br>ning gundrilled/   | M.O. 050518<br>d pieces wer   | 379 (Ref. AR 05<br>e PT examined  | 0501188<br>using AS                                       | 3-37), 30 other p<br>SME III, NB-254  | ieces were<br>16   |  |  |
|       | Note: Pressure testin  | ng will be perfo  | ormed per the re   | placement sl  | eeve installation   | n docume  | ents  |  |  |  |
| 8.    | Tests Conducted: 1 Pressure: N/A   |   | Pneumatic: Test Temp:  |   | oerating Pressur<br>F   | e: E  | exempt: Oth   | er: <u>X</u>   |  |  |
| NOTE: | Supplemental sheets in th  | e form of lists, ske  | tches, or drawings   | may be used pro   | ovided (1) size is 8 !  | 4 in. x 11 i  | nc.,  |  |  |  |

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: 5/6/06  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 <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>CT</u> have inspected the components described in this Owner's Report during the period <u>5/26/05</u> to <u>7/2/06</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.   |
| Inspector's Signature Commissions (National Board, State, Province, and Endorsements)  |
| Date July 12, 2006   |

#### SUPPLEMENTAL SHEET TO NIS-2 FORM

1. Owner: Southern California Edison Company

Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Plant: San Onofre Nuclear Generating Station
 Address: P.O. Box 128, San Clemente, CA 92672-0128

 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 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)

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<br>note 1 | RSO No  | Heat No  | Lot No | Length   | O.D.<br>note 2 | I.D.<br>note 2 | NDE Report |
|--------|---------------------|---------|----------|--------|----------|----------------|----------------|------------|
| Al     | 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 |
| El     | 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 |
| Fl     | 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:

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 inc.,

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

<sup>1.</sup> 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.

<sup>2.</sup> Values listed have been rounded to three digits; Where a range was listed on the M.O., only the larger value is shown.

#### Sheet 3 of 3

#### SUPPLEMENTAL SHEET TO NIS-2 FORM

Owner: Southern California Edison Company 1.

Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Date: 3/3/06 Unit: 2

RRP 001b-05

Repair/Replacement Plan: RRP 001a-05,

Plant: San Onofre Nuclear Generating Station 2.

Address: P.O. Box 128, San Clemente, CA 92672-0128

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,

4. Identification of System: Reactor Coolant System 05051898 000, 05051899 000, 05051901 000, 05051903 000 thru 05051906 000 (inclusive)

(a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, Summer 1971 Addenda (design). 5. 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

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

| Pen No | Serial No<br>note1 | RSO No  | Heat No  | Lot No | Length   | O.D.<br>note 2 | I.D.<br>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 |
| Hl     | 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 |
| Н3     | 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:

NOTE:

3.

<sup>1.</sup> 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.

<sup>2.</sup> Values listed have been rounded to three digits; Where a range was listed on the M.O., only the larger value is shown.

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

|   |   | <del>_</del>   |   |  |               |  |                                   |
|---|---|--|---|--|---------------|--|-----------------------------------|
| 1. Owner: Southern Ca<br>Address: 2244 Waln                     |   |  | 91770                                       | Date: 06/01/06<br>Unit: 2  |               | Sheet                                  | 1 of 1                            |
|   | Nuclear Generating  |  | 10  | Repair/Replacemer  | it Plan: (    | 011-05 R1, 01:                         | 2-06                              |
| Address: P.O. Box 13  | 28, San Ciemente, C   | amornia 92074-012  | 88  | MO/CWO: 05061  | 579000        |  |                                   |
| <ol><li>Work Performed by:<br/>Address: 2225 Skyla</li></ol>    |   |  |   | Type Code Symbol Authorization No:                                   | -             | N/A<br>N/A                             |                                   |
| I. Identification of Sys  | tem: Reactor Coola  | nt   |   | Expiration Date:   |               | N/A                                    |                                   |
| 5. (a) Applicable Const   |   | E Section III, NB, 1<br>Illoy 690 nozzle mat   |   | tion, Summer 1971 A  | ddenda,       | Code Case: N                           | -474-2                            |
| (b) Applicable Edition  5. Identification of Con                |   | ized for Repair/Rep  | lacemen                                     | t Activity: 1995 Edit  | ion, 199      | 6 Addenda                              |                                   |
| Name of Component   | Name of Manufacturer  | Manufacturer Serial<br>No.   | National<br>Board<br>No.                    | Other Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Pressurizer   | CE  | CE70602  | 21495                                       | S21201ME087  | 1976          |  | Yes                               |
| Lower level half nozzle assy, Type 2                            | SCE   | S/N RS-002-02-01<br>(Note 1)   | N/A   | 2LT-0110-1<br>S21201MR039<br>S21201ML315                             | N/A           | Installed                              | No                                |
| Lower level instrument nozzle                                   | SCE   | S/N 06021452 (Note 2)  | N/A   | 2LT-0110-2<br>S21201MR041<br>S21201ML316                             | N/A           | Installed                              | No                                |
| with new Alloy 690 r The field installation The work was implen | eplacements. The fa<br>work scope was per-<br>nented by the follow<br>0-2 location; RRP 0 | nbrication of the repleter of the repleter of the by Welding of the best of th | acement<br>Services<br>G-0110-1<br>r 101144 | l location; RRP 011-0<br>1-005. CWO 050615                           | zzles is d    | locumented sej<br>, WSI Traveler       | parately.<br>· 101144-            |
| Notes: 1) See work orders 0                                     | )2050913, 02041362  | and 05050798 for f   | abrication                                  | on of this item. Fabri<br>ISO S2-1201-ML-31                          |               |  |                                   |
| assy and root valve w   | vere reused. See wor<br>1116, Sh 2 (ECN A   | rk order 06021448 f<br>41908) "Type 1 Pres   | or remad                                    | was per dwg 41116,<br>chining of nozzle inse<br>Lower Level Insert A | rt weld p     | orep and replac                        | ement of                          |
| 3) Pressure Testing/  | VT-2 performed per  | procedure SO23-X   | VII-3.1.1                                   | l.   |               |  |                                   |
| 8. Tests Conducted: Hy  | drostatic Pr  | <del></del>  | •   | erating Pressure X  2250 psi Test                                    | Exempt        |  | er                                |

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: 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 <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>IIII/D</u> to <u>7/5/D</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  |
| Souard Shoten Commissions 1574 California N&I   |
| Inspector's Signature National Board, State, Province, and Endorsements   |
| Date 1006   |

| <ol> <li>Owner: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Plant: San Onofre Nuclear Generating Station<br/>Address: P.O. Box 128, San Clemente, California 92674-0128</li> <li>Work Performed by: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Identification of System: Reactor Coolant</li> <li>(a) Applicable Construction Code: ASME Section III, Class 1(NB), 1</li> <li>(b) Applicable Edition of Section XI Utilized for Repair/Replacement</li> <li>Identification of Components:</li> </ol> |  |   |  | Repair/Replacement F MO/CWO: 05061936 Type Code Symbol St Authorization No: Expiration Date: | 4000<br>tamp: :   | 20701067-82<br>N/A<br>N/A<br>N/A<br>N/A | 1 of 1                                 |                                   |
|---|--|---|--|--|---|---|--|-----------------------------------|
|   | Name of Component  | Name of Manufacturer  | Manufacturer<br>Serial No.   | National<br>Board<br>No.   | Other Identification  | Year<br>Built                           | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|   | Reactor Vessel   | CE  | 71170  | 22000  | S21101MV001A  | 1976                                    |  | Yes                               |
|   | Instrument Flange<br>Adapter Hub Pen. #92  | Westinghouse  | Ht. #238118, Tr.<br>#24988   | N/A  | RSO-1932-05, SA479 Tp. 316  | N/A                                     | Installed                              | No                                |
|   | Instrument Flange<br>Adapter Hub Pen. #95  | Westinghouse  | S/N 2, Ht. #72557  | N/A  | RSO-2350-02, SA182<br>F316 (RoR-005-03)                               | N/A                                     | Installed                              | No                                |
|   | Instrument Flange<br>Adapter Hub Pen. #100   | Westinghouse  | S/N 1, Ht. #72557  | N/A  | RSO-2350-02, SA182<br>F316 (RoR-005-03)                               | N/A                                     | Installed                              | No                                |
|   | hole configuration (repenetrations #95 & # counterbored deeper  Pressure Testing/VT- | g instrument hubs on<br>emoved hub is a 5-h<br>100 are returned to<br>to accept longer HJ<br>2 performed per site | nole). The replace the OEM 6-hole con TC that had in-serve procedure SO23- | ment hub<br>onfigurat<br>vice indu<br>XVII-3.  | 1.1   | Them                                    | ocouple (HJT                           | C)                                |
|   | 8. Tests Conducted: Hy   | drostatic Pi  |  |  | perating Pressure $X$ E $\geq 2250 \text{ psi} \qquad \text{Test Te}$ | Exempt<br>emp:                          | Othe<br>≥ 280 °F                       | r 📃                               |

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 Supervising ASME Codes Engineer Date: Signed: 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 2/22/06 to 7/S/06 the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions California National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code Section XI

|     | Owner: Southern California Edison Company Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  Plant: San Onofre Nuclear Generating Station | Date: 07/06/06  Unit: 2  Repair/Replacement Plan: 2 | Sheet 1 of 1 . ASME SECTION XI |  |
|-----|---|---|--------------------------------|--|
| _ • | Address: P.O. Box 128, San Clemente, California 92674-0128  | !   | DATA-0252,<br>030100336-64     |  |
| _   |   | MO/CWO: 05070080000                                 | 06011893000                    |  |
| 3.  | Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770                                | Type Code Symbol Stamp: Authorization No:           | N/A<br>N/A                     |  |
| 4.  | Identification of System: Reactor Coolant   | Expiration Date:                                    | N/A                            |  |
| 5.  | (a) Applicable Construction Code: ASME Section III, Class 1, 1974 E   | dition, No 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<br>Serial No.   | National<br>Board<br>No. | Other Identification        | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------|----------------------|------------------------------|--------------------------|-----------------------------|---------------|--|-----------------------------------|
| 4" 1515# Swing Check<br>Valve | Anchor/Darling       | E-3247-2-2                   | N/A                      | S21201MU977                 | 1984          |  | Yes                               |
| Disc                          | Anchor/Darling       | S/N 11, Ht.<br>#42246        | N/A                      |                             | 1984          | Removed                                | Yes                               |
| Disc                          | Flowserve            | 24187-2                      | N/A                      | RSO-1836-05, SA182<br>F316L | 2005          | Installed &<br>Corrected               | Yes                               |
| 5/8"-11 Heavy Hex Nut (2)     | Flowserve            | Ht. #75025, Tr.<br>Code 111C | N/A                      | RSO-1619-05, SA194 8M       | N/A           | Installed                              | No                                |
| 5/8"-11 Heavy Hex Nut<br>(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).

|    | _                  | ntained and verified results (ref: 2PT-04 |                   | The new surfaces created due | to the machining wer | e PT examined |
|----|--------------------|---|-------------------|------------------------------|----------------------|---------------|
|    | Note: Pressure T   | Testing/VT-2 perform                      | ned 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            |

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 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 11/4-105 to , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions Inspector's Signature National Board, State, Province, and Endorsements

# 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 Cardicate 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 Iname and address) W8421963, R/B SA182, F316L N/A N/A 2005 (drawing no.) Imai'l, spec, no.l frensile strength) (CAN) 1974 No N/A 5. ASME Code, Section III, Division 1: (addenda date) (Code Case no.) N/A 6. Fabricated in accordance with Const. Spec. (Div. 2 only) Revision Disk for size 4 1515# SC Valve. S.O. 33697 8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. 10 (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: National National Part or Appurtenance Serial Number Board No. Part or Appurtanance Board No. in Numerical Order Serial Number in Numerical Order N/A 24187-2 24187-3 (27) (28) (3) (29) (4) (5) (30) (31) (6) (32) (33) (34) (9) (35) (10) (11) (36) (37) (12)(38) (13)(39) (14)(40) (15) (41). (16). (42)(17) (43)(18). (44) (19) (45) (20) (21) (22) (48) (23) (49) (24) (50). (25) 650 2485 N/A - \*F. Hydro, test pressure at temp. \*F 10. Design pressure \_ psi. Temp. \* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

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

(7/98)

250-1836-05 TV

## FORM N-2 (Back - Pg 2 of 2)

|   | Certificate Hol  | der's Serial Nos. 24107-2   | through <u>24187-3</u>  |
|---|--|---|---|
|   | CERTIFICATION OF   | DESIGN  |   |
| Design specifications certified by  Design report* certified by   |  |   | Reg. no   |
| ·   | CERTIFICATE OF CO  | MPLIANCE  |   |
|   | this report are correct and that this (the<br>of the ASME Code, Section III, Division 1  |   |   |
| NPT Certificate of Authorization No   |  | Expires No  | ovember 26, 2006  |
| Date <u>8/25/05</u> Name _  | Flowserve Corporation (NPT Cardificate Holder)   | Signed  | A. (C.) (Suthorized representative)                                   |
|   | CERTIFICATE OF IN  | SPECTION  |   |
| of NC and employed b  | nmission issued by the National Board o  |   |   |
| or Hartford, CT hat best of my knowledge and belief, the Country listed has been By signing this certificate, neither the In this Data Report. Furthermore, neith | ve inspected these items described in the<br>Certificate Holder has fabricated these pa<br>n authorized for stamping on the date si<br>nspector nor his employer makes any wa<br>er the inspector nor his employer shall b | nis Data Report on <u>8-25</u> -<br>arts or appurtenances in accor<br>hown above.<br>arranty, expressed or implied, | rdance with the ASME Code, Section concerning the equipment described |
| or loss of any kind arising from or con   |  | Commissions NC 14   | [2]<br>incl. endorsements) and state or prov. and no.]                |

| 1. Owner: Southern C  | alifornia Edison Cor | mpany                                 |                          | Date: 01/12                                   | 2/06   | She           | et I of I                              |  |  |
|---|----------------------|---------------------------------------|--------------------------|---|--|---------------|--|--|--|
| 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 |                      |                                       |                          | 0 Unit: 2                                     | Unit: 2 Repair/Replacement Plan: 010-05  |               |  |  |  |
|   |                      |                                       |                          | Repair/Repla                                  |  |               |  |  |  |
|   |                      |                                       |                          | MO/CWO:                                       | 0508147300   | 0             |  |  |  |
| <ol><li>Work Performed by<br/>Address: 2244 Walr</li></ol>  |                      |                                       | _                        | Type Code S                                   | Symbol Stamp   | o: N/A<br>N/A |  |  |  |
| 4. Identification of Sy   | stem: Reactor Cool   | ant                                   |                          | Expiration I                                  |  | N/A<br>N/A    |  |  |  |
| 5. (a) Applicable Cons  |                      |                                       | ss 1 (NB                 | 3), 1971 Edition,                             | S.'71_Addend   | a; Code Case: | N-474                                  |  |  |
| · / 11  |                      |                                       |                          |   |  |               |  |  |  |
| (b) Applicable Editi  | on of Section XI Ut  | ilized for Repair/R                   | eplaceme                 | ent Activity: 199                             | 5 Edition, 19  | 96 Addenda    |  |  |  |
| C 14-45-4   |                      | •                                     | •                        |   |  |               |  |  |  |
| 6. Identification of Con  | mponents:            | · · · · · · · · · · · · · · · · · · · | 1                        |   |  | Corrected.    | ASME                                   |  |  |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No.            | National<br>Board<br>No. | Other Identific                               | ation Yea<br>Bui   | r Removed, or | Code<br>Stamped<br>Yes/No              |  |  |
| Pressurizer Lower Level<br>(Type 2) Half Nozzle   | SCE                  | 009-03-2                              | N/A                      | Fabricated on MC<br>03120617 & MO<br>03121457 | The state of the s | Corrected     | No                                     |  |  |
| 7. Description of Work  | L                    |                                       | J                        | <u> </u>                                      |  |               | لـــــــــــــــــــــــــــــــــــــ |  |  |
| Machined the previous diameter required for 034-05 was performe   | the 2LT-0110-1 and   | d 2 plant locations                   | in accord                | dance with Repai                              |  |               |  |  |  |
| 8. Tests Conducted: Hyd   | drostatic Pn         |                                       |                          |   | Exempto Test Tempto  | _             | er                                     |  |  |

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: 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 <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>9-1-2005</u> to <u>2-17-2006</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning |
| the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  Commissions HODA N. NS. T. California 1862.  Inspector's Signature  Commissions HODA N. NS. T. California 1862.  National Board, State, Province, and Endorsements   |
| Date tub. 17, 2006  |

| Address: P.O. Box 1  3. Work Performed by: Address: 2244 Waln  4. Identification of Sys  5. (a) Applicable Const  | ut Grove Avenue, R Nuclear Generating 28, San Clemente, C Southern Californ ut Grove Avenue, R stem: Reactor Cools truction Code: ASM 474- on of Section XI Uti | Repair/Replacement MO/CWO: 0511052 | 29000 (<br>tamp: ]       | 12-05, 013-05<br>05110433000<br>N/A<br>N/A<br>N/A<br>da and Code C |                  |  |                                   |  |  |  |
|---|---|------------------------------------|--------------------------|--|------------------|--|-----------------------------------|--|--|--|
| Name of Component   | Name of Manufacturer  | Manufacturer<br>Serial No.         | National<br>Board<br>No. | Other Identification   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |  |  |
| Inconel 690 Round Bar<br>Stock (Nozzle Assy)  | Special Metals<br>Corp.   | Ht. #NX3189HK,<br>Lot 11           | N/A                      | RSO-1778-03, Assy<br>#05110529-1                                   | N/A              |  | No                                |  |  |  |
| SA479 Tp 316L Round<br>Bar Stock (Safe-End)   | Energy Steel &<br>Supply Co.  | Ht. #48390, Lot<br>Code DTZ2       | N/A                      | RSO-1133-97-01, Safe-<br>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: Hy  | drostatic P   | المجموعة                           | Iominal C<br>ressure:    |  | Exempt<br>emp: ] |  | r                                 |  |  |  |

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 Supervising ASME Codes Engineer Date: Signed: 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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> 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. 1574 California Commissions National Board, State, Province, and Endorsements Inspector's Signature

| Owner: Southern California Ec<br>Address: 2244 Walnut Grove A  |                                       | mia 01 <i>770</i>        | Date: 01/24/06                      |               | Shee                                   | t 1 of 1                          |  |  |  |
|--|---------------------------------------|--------------------------|-------------------------------------|---------------|--|-----------------------------------|--|--|--|
| Plant: San Onofre Nuclear G     Address: P.O. Box 128, San Cl  | enerating Station                     |                          | Repair/Replacen                     |               | Plan: 051100503-33                     |                                   |  |  |  |
| 3. Work Performed by: Southern Address: 2244 Walnut Grove A  | •                                     | -                        | MO/CWO: '051  Type Code Sym         | bol Stamp:    | ıp: N/A                                |                                   |  |  |  |
| 4. Identification of System: Read  | -                                     |                          | Authorization N<br>Expiration Date: |               | N/A<br>N/A                             | ٠                                 |  |  |  |
| 5. (a) Applicable Construction Co  |                                       | B (CLASS                 | 1), 1971 Ed, Summ                   | er 1971 Ad    | d., Code Case                          | : None                            |  |  |  |
| <ul><li>(b) Applicable Edition of Section</li><li>6. Identification of Components:</li></ul>   | on XI Utilized for Repair/I           | Replaceme                | nt Activity: 1995 E                 | dition. 1990  | 5 Addenda                              | ·                                 |  |  |  |
| Name of Component Name of Ma   | nufacturer Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |  |  |
| Pressurizer Vessel CE  | 70602                                 | 21495                    | S21201ME087                         | 1976          | Corrected                              | Yes                               |  |  |  |
|  |                                       |                          |                                     |               |  |                                   |  |  |  |
| 7. Description of Work:  12 additional holes were cut in the second seco | he Pressurizer vessel skirt           | per ECP (                | 51100503-7 to facil                 | itate coolin  | g of heater re                         | ceptacles.                        |  |  |  |
| ·  |                                       |                          |                                     |               | •                                      |                                   |  |  |  |
|  |                                       |                          |                                     |               |  |                                   |  |  |  |
|  | ·                                     |                          |                                     |               |  |                                   |  |  |  |
|  |                                       |                          |                                     |               |  |                                   |  |  |  |
|  |                                       |                          | ·                                   |               |  |                                   |  |  |  |
| 8. Tests Conducted: Hydrostatic  | Pneumatic 1                           | Nominal Op               | perating Pressure                   | Exempt        | Oth                                    | er                                |  |  |  |
|  | P                                     | ressure: <u>]</u>        | <u>V/A</u> psi Te                   | est Temp: ]   | <u> </u>                               |                                   |  |  |  |

| (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 1-13-06 to 2-17-196, 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   |

National Board, State, Province, and Endorsements

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company

Date: 04/11/06

Unit: 2

Sheet 1 of 1

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

Repair/Replacement Plan: GEN-206

3. Work Performed by: Southern California Edison Company

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

Type Code Symbol Stamp: N/A

MO/CWO: 06010310000

Authorization No:

4. Identification of System: Reactor Coolant

Expiration Date:

N/A

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<br>Serial No. | National<br>Board<br>No. | Other Identification                                      | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-----------------------------|-----------------------|----------------------------|--------------------------|---|---------------|--|-----------------------------------|
| 36" Reactor Coolant<br>Pump | Byron Jackson         | 701-N-0560                 | N/A                      | S21201MP003   | 1978          |  | Yes                               |
| RCP Pump Mechanical<br>Seal | Bingham<br>Willamette | 1714880-6                  | 1166                     | RSO-2779-86, SO23-<br>CART#16, Rebuild MO<br>06021593     | 1986          | Removed                                | Yes                               |
| RCP Pump Mechanical<br>Seal | Bingham<br>Willamette | 1714880-7                  | 1167                     | RSO-2779-86, SO23-<br>CART-#17, Rebuilt on<br>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 | Pn | neumatic | Nominal Operating | Pressure | X      | Exempt [  |     | Other |  |
|---------------------|-------------|----|----------|-------------------|----------|--------|-----------|-----|-------|--|
|                     |             |    |          | Pressure: ≥2250   | psi      | Test 7 | Γemp: ≥ 2 | 280 | °F    |  |

9. Remarks: None.

| (Applicable Manufacturer's Data Reports to be attached)  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| CERTIFICATE OF COMPLIANCE  |  |  |  |  |  |  |  |
| 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: 4/12/0C Owner or Owner's Designee, Title   |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 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 12006 to 7506, 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  Commissions  National Board, State, Province, and Endorsements   |  |  |  |  |  |  |  |
| Date_7/5/06  |  |  |  |  |  |  |  |

As Required by the Provisions of the ASME Code Section XI

| 1. Owner: Southern California Edison Company | Date: 03/27/06 |
|--|----------------|
|--|----------------|

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 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: 060100463-9 MO/CWO: 06010638001 06010638000

3. Work Performed by: Southern California Edison Company

Type Code Symbol Stamp: N/A

Address: 2244 Walnut Grove Avenue, Rosemead, California 91770

Authorization No: N/A

4. Identification of System: Safety Injection and Shutdown Cooling

Expiration Date: N/A

5. (a) Applicable Construction Code: ASME Section III, Class 2 (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<br>Serial No.     | National<br>Board<br>No. | Other Identification           | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|-------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------------|---------------|--|-----------------------------------|
| Pipe Spool                    | Pullman, Inc.             | N-8199                         | N/A                      | S21204ML036, S2-SI-036-<br>006 | 1978          | Corrected                              | No                                |
| 8" NPS Sch. 20 Pipe           | Dubose National<br>Energy | Ht. #732312, Tr.<br>Code 26105 | N/A                      | RSO-0172-06, SA312 Tp<br>304   | N/A           | Installed                              | No                                |
| 1" 600# Y-Type Globe<br>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 | g Pressure | X    | Exempt    | Other |  |
|----|------------------|-------------------|-------------|-------------------|------------|------|-----------|-------|--|
|    |                  | See: AR 060100463 | <u>3-41</u> | Pressure: ≥347    | psi        | Test | Temp: N/A | °F    |  |

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: Supervising ASME Codes Engineer Date: 7/6/6 C 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 1/31/00 to 1/5/00, 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 his inspection.  Commissions  Commissions  National Board, State, Province, and Endorsements |
| National Board, State, Province, and Endorsements  |
| Date VII y 10, AVVO  |

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

| Address: 2244 Walnut Grove Avenue Rosemend California 91770              |  |                             |                          | Date: 07/03/06<br>Unit: 2                   |               | Sheet 1 of 1                           |                                   |  |
|--|--|-----------------------------|--------------------------|---|---------------|--|-----------------------------------|--|
| 2. Plant: San Onofre M<br>Address: P.O. Box 12                           | Repair/Replacement Plan: 060100998-08  MO/CWO: 06011050000 |                             |                          |   |               |  |                                   |  |
| Address 7744 Walnut Grave Avenue Pasement California VI //II             |  |                             |                          | Type Code Symbol S<br>Authorization No:     | •             | N/A                                    |                                   |  |
| 4. Identification of Syst  | em: Reactor Coola  | nt                          |                          | Expiration Date:                            |               | N/A                                    |                                   |  |
| 5. (a) Applicable Constr   | ruction Code: ASM  | E Section III, Class        | 1 (NB),                  | 1971 Edition, Summer                        | 71 Ad         | denda.                                 |                                   |  |
| <ul><li>(b) Applicable Editio</li><li>6. Identification of Com</li></ul> |  | ized for Repair/Rep         | lacement                 | Activity: 1995 Edition                      | n, 1990       | 6 Addenda                              |                                   |  |
| Name of Component  | Name of Manufacturer                                       | Manufacturer Serial<br>No.  | National<br>Board<br>No. | Other Identification                        | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| Pressurizer  | CE   | 70602                       | 21495                    | S21201ME087                                 | 1976          |  | Yes                               |  |
| 2"-8UN x 14-1/2" Stud (7)  | Nova Machine<br>Products                                   | Ht. #83633, Ht. Code<br>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<br>(12)   | Nova Machine<br>Products                                   | Ht. #78203, Ht. Code<br>ЉХ  | N/A                      | RSO-0056-99, SA194 gr. 7                    | N/A           | Installed                              | No                                |  |
| 2"-8UN Heavy Hex Nut (2)   | Mackson, Inc   | Ht. #M89768, Tr.<br>#HOO3   | N/A                      | RSO-2377-03, SA194 gr. 7                    | N/A           | Installed                              | No                                |  |
| 2"-8UN Heavy Hex Nut (1)   | Mackson, Inc   | Ht. #8876873, Tr.<br>#S298  | N/A                      | RSO-1060-02, SA194 gr. 7                    | N/A           | Installed                              | No                                |  |
| 2"-8UN Heavy Hex Nut (1)   | Nova Machine<br>Products                                   | Ht. 95335, Ht. Code<br>FHZ  | N/A                      | RSO-0904-97, SA194 gr. 7                    | N/A           | Installed                              | No                                |  |
| 7. Description of Work   | <u>.</u>   |                             | J                        | .1  | I             | L                                      |                                   |  |
|  |  |                             |                          | on on S21201ME087 was replacement fasteners |               |  |                                   |  |
| Note: Pressure Testin  | ng/VT-2 performed  | per procedure SO23          | 3-XVII-3                 | .1.1.                                       |               |  |                                   |  |
|  |  |                             |                          |   |               |  |                                   |  |
|  |  |                             |                          |   |               | •                                      |                                   |  |
| 8. Tests Conducted: Hyd  | drostatic Pr   | neumatic No                 | minal Op                 | erating Pressure X                          | Exempt        | ·!                                     | er                                |  |
|  |  | Pres                        | ssure: ≥                 | 2250 psi Test T                             | emp:          | ≥280 °F                                |                                   |  |

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 Supervising ASME Codes Engineer Date: Signed: 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 2/1106 to\_ \_, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions nspector's Signature National Board, State, Province, and Endorsements

| 1. Owner: Southern C  |                      |                            | nia 91770                | Date: 03/16/06  |                  | Shee                                   | t 1 of 1                          |
|---|----------------------|----------------------------|--------------------------|---|------------------|--|-----------------------------------|
|   | Nuclear Generating   | Station                    |                          | Repair/Replacement                                      |                  | 3EN-251                                |                                   |
| 3. Work Performed by<br>Address: 2244 Walr                              |                      |                            | _                        | Aumorization No:  | tamp:            | N/A                                    |                                   |
| 4. Identification of Sys  | stem: Reactor Cool   | ant                        |                          | Expiration Date:  |                  | N/A                                    |                                   |
| ,   | 409-                 | <u>2.</u>                  |                          | ), 1974 Ed., S. '74 Add. a                              | . •              |  | ion SO23-                         |
| <ul><li>(b) Applicable Editi</li><li>6. Identification of Con</li></ul> |                      | ilized for Repair/R        | Replaceme                | ent Activity: <u>1995 Editio</u>                        | n, 1996          | 5 Addenda                              | ··•                               |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification                                    | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Mechanical Snubber<br>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<br>Gr.630 @ 1075 F                | 1995             | Installed                              | No                                |
|   | ıd with a replacemer |                            |                          | n plant location S2RC012<br>rmed after installation wit |                  |  |                                   |
|   |                      |                            |                          |   |                  |  |                                   |
| 8. Tests Conducted: Hy  | drostatic Pi         |                            | Nominal C                |   | Exempt<br>emp: ] |  | er                                |

| (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: 3/22/06  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 1/25/06 to 1/1/100, 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  Commissions  National Board, State, Province, and Endorsements   |
| Date 7706   |

| 1. Owner: Southern C<br>Address: 2244 Wal | California Edison Cor<br>nut Grove Avenue, R |  | nia 9177(                | Date: 06/13/06  Unit: 2  |               | Shee                                   | t 1 of 1                          |
|---|--|--|--------------------------|--|---------------|--|-----------------------------------|
|   | Nuclear Generating<br>128, San Clemente, G   |  | 0128                     | Repair/Replacement   |               |  |                                   |
| 3. Work Performed by<br>Address: 2244 Wal | r: Southern Californ<br>nut Grove Avenue, R  | =  | =                        | MO/CWO: 060112  Type Code Symbol: Authorization No:              | Stamp:        | N/A<br>N/A                             |                                   |
| 4. Identification of Sy                   | stem: Primary Plan                           | t Makeup                                   |                          | Expiration Date:   |               | N/A                                    |                                   |
| 5. (a) Applicable Cons                    |  | ME Section III, Cla<br>4 Ed., S. 74 Add. ( |                          | 11 Ed., S.'73 Add. (valve) ad installation).                     | ; ASMI        | E Section III,                         | Class 2,                          |
| (b) Applicable Edit                       | ion of Section XI Ut                         | ilized for Repair/R                        | eplaceme                 | ent Activity: 1995 Edition                                       | on, 1996      | 6 Addenda                              |                                   |
| 6. Identification of Co                   | mponents:                                    | :  |                          |  |               |  |                                   |
| Name of Component                         | Name of Manufacturer                         | Manufacturer<br>Seriał No.                 | National<br>Board<br>No. | Other Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>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                               |
| Complete removal o                        | activities on S21901                         | ossible and the va                         | lve requi                | 095000, the valve cover a<br>red replacement. MO 06<br>2-06-072. |               |  |                                   |
|   |  |  |                          |  |               |  |                                   |
|   |  |  |                          |  |               |  |                                   |
|   |  |  |                          |  |               |  |                                   |
|   |  |  |                          |  |               |  |                                   |
|   |  |  |                          |  |               |  |                                   |
| 8. Tests Conducted: H                     |  |  |                          | Operating Pressure X   |               | _                                      | er                                |
| <u>Se</u>                                 | ee: AR 051001145-0                           | <u>ა</u> Р                                 | ressure:                 | ≥ 19 psi Test 7  | Гетр: 1       | N/A F                                  |                                   |

9. Remarks: None.

| (Applicable Manufacturer's Data Reports to be attached)              |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| CERT   | CERTIFICATE OF COMPLIANCE  |  |  |  |  |  |
| I certify that the statements made in the report a Code, Section XI. | re correct and that this conforms to the requirements of the ASME  |  |  |  |  |  |
| Type Code Symbol Stamp: N/A  |  |  |  |  |  |  |
| Certificate of Authorizaton No: N/A                                  | Expiration Date: N/A   |  |  |  |  |  |
| Signed: Owner or Owner's Designee, Title                             | Supervising ASME Codes Engineer Date: 6/22/0C  |  |  |  |  |  |
| CERTIFIC   | CATE OF INSERVICE INSPECTION   |  |  |  |  |  |
|  | issued by the National Board of Boiler and Pressure Vessel Inspectors and oved by HSBCT of Hartford, Connecticut have inspected the components |  |  |  |  |  |

| 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  |
| Sward Saston Commissions 1574 California N € I  |
| Inspector's Signature National Board, State, Province, and Endorsements   |
| Date 6/25/06  |

RSO-6490-85-01

PAGE 22

FORM NPV-1 N CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR PUMPS OR VALVES\* As Required by the Provisions of the ASME Code, Section III, Div. 1 Valror #543 N20531 Valent Engineering Corporation, Springfield, New Jersey 7. Manufactured by . (Name and Address of N Certificate Holder Beehtel Power Corporation, San Clemente, California 2. Manufactured for (Name and Address of Purchases or Dwhat) San Onotre Nuclear Generating Station, San Clemente, Lalifornia 3. Location of Installation \_ INeme and Address! Valve Outlet Size 4. Pump or Valve . Norpinal Intel Size linen) (INCh) (a) Model No., (b) N Gerillicate Holder's (c) Canadian (I) Natil Ipi Year Registration Idl Drawing Series No. Serial Bd No Built or Type No No. No tel Class 497000001 MA 1985 497000001 1 and 2 A/K111 (2) (3) (4) (5) (6) 17) (B) 131 1101 Normally Closed Check Valva for horated veter service operating at 150 PSIG at (Breef description of service for which equipment was designed) 250 OF 250 1368 H/A 6. Design Conditions \*F or Valve Pressure Class . ពរ Producal 1440 7. Cold Working Pressure psi at 100°F. & Pressure Retaining Pieces Mark No. Material Spec. No. Manufacturer Remarks lat Castings 5/N 1 LOC X797N V52010-820-544 **CFBM** Quaker Allcy ASHE SA-351 <u>5/k 2 lot/ 1,218</u>k (b) Forgings

<sup>(1)</sup> For manually operated valves only,

<sup>&</sup>quot;Supplemental intuitiation of the light of old, and the lights for tradity of a following entering.

This up this Data Report is included on each about [D] each about it humbayed and the nonther of theory is equally as for a form, and (4) each additional sheat enail be alsoed by the Certificate Holder and the ANI.

| พ20531   | punda tar pro   | inere'   | Value - 2  |
|--|---|--|--|
| Mark No.   | Material Spec. No.  | Manufacturer                                       | Remarks  |
| Ici Bohing N/A                                     |   |  |  |
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| ldl Other Parts                                    |   |  |  |
| V52019-09-3  | ASHE SA-479 Type 316  | Cartech  | Lot # J370NU                                       |
| V52046-07-1  | ASME SA-479 Type 316  | Cyclops  | TOT A 1941MO                                       |
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| 2175   |   | <u> </u>   |  |
| tydrospetic best                                   | psi. Disk Differential test pressure 16                       | Pel.   |  |
| IN Cortificat                                      | ineering Corporation by a Holder) Inhorization No. 1076 to.us | se the N   | mbol expires 5/6/87                                |
| · · · · · · · · · · · · · · · · · · ·              | CERTIFICATION OF  | DESIGN   |  |
| sion information on file                           | Valcor Engineering Cor  | poration   |  |
| ess analysis report (Cla                           | 50 1 4  |  |  |
| <del></del>  |   |  |  |
| sign specifications certifications and California  | 12252   |  |  |
| ess analysis certified by                          |   |  | ·  |
| State N/A  | Reg. No. N/A  |  |  |
| Signature not required.                            | List name only.   |  |  |
|  |   | <del></del>  | PG 23  |
| <del></del>  | CERTIFICATE OF SHOP   | NCDECTION .  | 762,5  |
|  | •   |  | •  |
| re undersigned, holding<br>The State or Province o | g a valid commission issued by the Na<br>A - New Jetsey       | ational Board of Boller and and employed by *Facto | d Pressura Vessel Inspectors<br>orv Mucusal System |
| Norwood, Hass.                                     |   |  | sed in this Data Report or                         |
| June 26,   |   |  | ie N Certificate Holder has con-                   |
| ktied this pump, or valv                           | re, In accordance with the ASME Code, S                       | Section III.                                       |  |
| eigning this cestificate,                          | neither the inspector nor his employer                        | Shakes any wattenly, expri                         | ile Ins. Co.<br>wased or impled, concerning        |
| equipment described is                             | n this Data Report Furthermore, neithe                        | ir the Inspector nor his am                        | ployer shall be liable in any                      |
|  | njury or property demage or a loss of an                      |  |  |
| ie hine 26   | <u>85</u> .   |  | •  |
| - Acederical Manager                               | Commissio   | NE UJZOL INATI BO SINIO                            | Prov and No.1                                      |
| •            | •   | , 00 , 3(B(#,                                      | THE PERSON LINES                                   |

| 1. Owner: Southern Ca<br>Address: 2244 Waln |   |   | nia 9177                 | Date: 07/04/06  Unit: 2                                    |                   | Shee                                   | t 1 of 1                          |
|---|---|---|--------------------------|--|-------------------|--|-----------------------------------|
| 2. Plant: San Onofre<br>Address: P.O. Box 1 | Nuclear Generating<br>28, San Clemente, C |   | 0128                     | Repair/Replacement MO/CWO: 060115                          |                   | BEN-250, GE                            | N-252                             |
| 3. Work Performed by:<br>Address: 2244 Waln |   | · ·                                       | =                        | Type Code Symbol S<br>Authorization No:                    | Stamp: 1          | N/A                                    |                                   |
| 4. Identification of Sys                    | stem: Main Steam                          |   |                          | Expiration Date:   |                   | N/A                                    |                                   |
| 5. (a) Applicable Cons                      |   | ME Section III, Clar<br>and Design Specif |                          | ), 1974 Ed., S.'74 Add. (i<br>O23-409-2.                   | <u>ncludin</u>    | g Code Case                            | <u>1644-1/ N-</u>                 |
| (b) Applicable Edition                      | on of Section XI Uti                      | lized for Repair/R                        | Replacem                 | ent Activity: 1995 Edition                                 | on, 1996          | Addenda                                |                                   |
| 6. Identification of Con                    | mponents:                                 |   |                          |  |                   |  |                                   |
| Name of Component                           | Name of Manufacturer                      | Manufacturer<br>Serial No.                | National<br>Board<br>No. | Other Identification                                       | Year<br>Built     | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Mechanical Snubber<br>PSA-100-6"            | Pacific Scientific                        | S/N 253                                   | N/A                      | S2ST002H002  | 1977              | Removed                                | Yes                               |
| Mechanical Snubber<br>PSA-100-6"            | Pacific Scientific                        | S/N 2383                                  | N/A                      | RSO-2503-05, P/N<br>1801119-09                             | 1985              | Installed                              | No                                |
| Load Pin (2)                                | Pacific Scientific                        | Ht. #36933, Tr.<br>Code N3254A            | N/A                      | RSO-3278-93, SA565<br>Gr.630 H-1100                        | N/A               | Installed                              | No                                |
|   | ber located in plant                      |   |                          | as replaced with an in-kin<br>3) after installation with s |                   |  | er and (2)                        |
| 8. Tests Conducted: Hy                      | drostatic P                               | i   | Nominal (<br>ressure:    |  | Exempt<br>Temp: 1 |  | er                                |

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 Authorizaton No: N/A Expiration Date: N/A Supervising ASME Codes Engineer Date: Signed: 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 <u>California</u>, and employed by <u>HSBCT</u> of <u>Hartford</u>, <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>1,12,00</u> to <u>1,500</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions

| Owner: Southern Ca<br>Address: 2244 Waln   |   |                              | ia 91 <b>77</b> (        | Date: 06/23/06 Unit: 2   |                  | Shee                                   | t 1 of 1                          |
|--|---|------------------------------|--------------------------|--|------------------|--|-----------------------------------|
| 2. Plant: San Onofre<br>Address: P.O. Box 1  | Nuclear Generating<br>28, San Clemente, (     |                              | 0128                     | Repair/Replacement I   |                  | 60101538-01                            | , GEN-23                          |
| <ol> <li>Work Performed by:<br/>Address: 2244 Waln</li> <li>Identification of Systems</li> </ol> | ut Grove Avenue, R                            | osemead, Californ            | _                        | MO/CWO: 0601179  Type Code Symbol S Authorization No: Expiration Date: | tamp:            | N/A<br>N/A<br>N/A                      |                                   |
|  | on of Section XI Uti                          |                              |                          | 4 Edition, Summer 74 Adent Edition   ent Activity: 1995 Edition        |                  | 5 Addenda                              |                                   |
| Name of Component  | Name of Manufacturer                          | Manufacturer<br>Serial No.   | National<br>Board<br>No. | Other Identification   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Pipe Spool   |   | -                            | N/A                      | 2-CS-047-033, S2-1206-<br>ML-047                                       | N/A              |  | No                                |
| 7/8"-9 x 36" All-Thread<br>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.<br>Code JSY | N/A                      | RSO-1277-05, SA194 2H  | N/A              | Installed                              | No                                |
|  | fasteners on spool pi<br>n all-thread stock w | ith the required ma          | arkings tı               | rdance with RRP 0601015<br>ransferred to the cut pieces                |                  |  |                                   |
| Note: Pressure test r  | ot required. Open o                           | ended system exen            | npted per                | • IWC-5222   |                  |  |                                   |
| 8. Tests Conducted: Hy   | drostatic P                                   |                              |                          | Operating Pressure F   | Exempt<br>emp: ] | ·                                      | er                                |

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 Authorizaton No: N/A Expiration Date: N/A Signed: Supervising ASME Codes Engineer Date: 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 <u>California</u>, and employed by <u>HSBCT</u>, of <u>Hartford</u>, <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>175/06</u> to <u>7/5/06</u>, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. **Commissions** spector's Signature National Board, State, Province, and Endorsements

| 1. Owner: Southern C<br>Address: 2244 Walr |                      |                                       | nia 9177                 | Date: 02/23/06                                    |                | Shee                             | tlofl                             |
|--|----------------------|---------------------------------------|--------------------------|---|----------------|----------------------------------|-----------------------------------|
|  | Nuclear Generating   | g Station                             |                          | Unit: 2 Repair/Replaceme                          | nt Plan: (     | GEN-250                          |                                   |
| 3. Work Performed by<br>Address: 2244 Waln |                      |                                       | -                        | MO/CWO: 06011 Type Code Symbo Authorization No:   | l Stamp:       | N/A<br>N/A                       |                                   |
| 4. Identification of Sys                   | stem: Chemical and   | d Volume Control                      |                          | Expiration Date:                                  |                | N/A                              |                                   |
| 5. (a) Applicable Cons                     |                      | ME Section III, Clarification SO23-40 |                          | 1974 Edition, Summer                              | 1974 Ad        | idenda and De                    | esign_                            |
| •    |                      | ilized for Repair/F                   | Replacem                 | ent Activity: 1995 Edi                            | tion, 199      | 6 Addenda                        |                                   |
| 6. Identification of Cor                   | mponents:            |                                       | · ·                      |   | <del></del>    | Comment                          | LACYCE                            |
| Name of Component                          | Name of Manufacturer | Manufacturer<br>Serial No.            | National<br>Board<br>No. | Other Identification                              | Year<br>Built  | Corrected, Removed, or Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Mechanical Snubber 1/4                     | Pacific Scientific   | 7128                                  | N/A                      | S2-VC-058-H-004                                   | 1979           | Removed                          | No                                |
| Mechanical Snubber<br>PSA 1/4              | Pacific Scientific   | 39323                                 | N/A                      | RSO-0256-97, P/N<br>1801104-05                    | 1997           | Installed                        | No                                |
|  | ber located in plant |                                       |                          | as replaced in-kind. Th<br>noved snubber was plac |                |                                  |                                   |
|  |                      |                                       |                          |   |                | ·                                |                                   |
|  |                      |                                       |                          | ·   |                |                                  |                                   |
|  |                      |                                       |                          |   |                |                                  |                                   |
|  |                      |                                       |                          |   |                |                                  |                                   |
| 8. Tests Conducted: Hyd                    | drostatic Pr         | •                                     | Nominal O                | perating Pressure  N/A psi Test                   | Exempt Temp: 1 |                                  | <b>:</b> r                        |

| ·   | facturer's Data Reports to be attached)   |
|---|---|
| CERTIFI   | CATE OF COMPLIANCE  |
| I certify that the statements made in the report are Code, Section XI.  | correct and that this conforms to the requirements of the ASME  |
| 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: 2/23/06   |
|   |   |
| CERTIFICA   | TE OF INSERVICE INSPECTION  |
| the State or Province of <u>California</u> , and employed described in this Owner's Report during the period                        | used by the National Board of Boiler and Pressure Vessel Inspectors and by HSBCT of Hartford, Connecticut have inspected the componer to 1-26-206 to 2-24-2006, and state that the performed examinations and taken corrective measures described in the measures of the ASME Code. Section XI. |
| •   | ······································  |
| the examinations and corrective measures describ  | or his employer makes any warranty, expressed or implied, concerning and in this Owner's Report. Furthermore, neither the Inspector nor his ersonal injury or property damage or a loss of any kind arising from or   |
| the examinations and corrective measures describe employer shall be liable in any manner for any perconnected with this inspection. | or his employer makes any warranty, expressed or implied, concerning ed in this Owner's Report. Furthermore, neither the Inspector nor his  |

|                            | ut Grove Avenue, R Nuclear Generating 28, San Clemente, C Southern Californ aut Grove Avenue, R stem: Chemical and truction Code: ASM 1974 on of Section XI Uti | osemead, Californ<br>Station<br>California 92674-0<br>ia Edison Company<br>cosemead, Californ<br>Volume Control<br>ME Section III, Cla<br>JEd., S.'74 Add. (1 | 9128<br>ia 91770<br>ss 2, 197<br>Piping an | Repair/Replacement I  MO/CWO: 0601194  Type Code Symbol Son Authorization No: Expiration Date:  1 Ed., S.'73 Add. (Valve): | 6000<br>tamp: 1  | 060101753-06<br>N/A<br>N/A<br>N/A<br>TE Section III, | l of 1                            |
|----------------------------|---|---|--|--|------------------|--|-----------------------------------|
| Name of Component          | Name of Manufacturer  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                   | Other Identification   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed               | ASME<br>Code<br>Stamped<br>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<br>Energy   | Ht. Code W26538   | N/A  | RSO-0216-06, SA376 Tp.<br>304  | N/A              | Installed  | No                                |
| 060101753-06 and w         | lve in plant location<br>reld records WR2-06  | 5-069 and WR2-06  | 5-070.                                     | ilar valve in accordance w   |                  |  |                                   |
| 8. Tests Conducted: Hy See | e: AR 060101753-1   |   | lominal C<br>essure:                       |  | Exempt<br>emp: 1 |  | r                                 |

| (Аррика  | able Manufacturer's Data Reports to be attached)  |  |  |  |  |  |
|--|---|--|--|--|--|--|
| CE   | CERTIFICATE OF COMPLIANCE   |  |  |  |  |  |
| I certify that the statements made in the repo<br>Code, Section XI.  | rt are correct and that this conforms to the requirements of the ASME   |  |  |  |  |  |
| 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: 7/5/06  |  |  |  |  |  |
| CERT   | FICATE OF INSERVICE INSPECTION  |  |  |  |  |  |
| the State or Province of <u>California</u> , and endescribed in this Owner's Report during the the best of my knowledge and belief, the Owner's Report during the control of the best of my knowledge and belief, the Owner's Report during the owner's Report during the control of the c | ton issued by the National Board of Boiler and Pressure Vessel Inspectors and apployed by HSBCT of Hartford, Connecticut have inspected the component period to 1/12/10/6, and state that to where has performed examinations and taken corrective measures described in requirements of the ASME Code, Section XI. |  |  |  |  |  |
| the examinations and corrective measures d   | ector nor his employer makes any warranty, expressed or implied, concerning escribed in this Owner's Report. Furthermore, neither the Inspector nor his any personal injury or property damage or a loss of any kind arising from or  |  |  |  |  |  |
| connected withvirus respection.  | 1571  |  |  |  |  |  |
| Tany Daston  | Commissions 19/4 California N# L  |  |  |  |  |  |

| 1. Owner: Southern C<br>Address: 2244 Wal   | California Edison Cor<br>nut Grove Avenue, R |                            | ia 91770                 | Date: 06/22/06  Unit: 2  |               | Sheet                                  | t 1 of I                          |
|---|--|----------------------------|--------------------------|--|---------------|--|-----------------------------------|
|   | e Nuclear Generating<br>128, San Clemente, G |                            | 0128                     | Repair/Replacement   |               | 50300102-18                            |                                   |
| <ol> <li>Work Performed by<br/>Address: 2244 Wal</li> <li>Identification of Sy</li> </ol> | nut Grove Avenue, R                          | Rosemead, Californ         | ia 91770                 | MO/CWO: 0601213  Type Code Symbol S Authorization No: Expiration Date: | Stamp:        | N/A<br>N/A<br>N/A                      |                                   |
| _   |  |                            | _                        | 4 Edition, Winter 1974 A   | Addenda       | <u>a</u>                               |                                   |
| <ul><li>(b) Applicable Edit</li><li>6. Identification of Co</li></ul>                     |  | ilized for Repair/R        | eplaceme                 | ent Activity: 1995 Edition   | on, 1996      | 5 Addenda                              |                                   |
| Name of Component   | Name of Manufacturer                         | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identification   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 24" 150# Butterfly<br>Valve   | Fisher Controls                              | BF228817                   | 4299                     | 2HV9303  | 1979          | Corrected                              | Yes                               |
| 7. Description of Wor<br>Tack welded set scr<br>and RRP 05030010                          | ew to retaining ring o                       | on valve in plant lo       | ocation 21               | HV9303 in accordance w   | ith welc      | l record WR2-                          | -06-062                           |
| 8. Tests Conducted: H   | ydrostatic P                                 |                            |                          | Operating Pressure   |               |  | er X                              |

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: Supervising ASME Codes Engineer Date: 7/3/0C 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 <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>Connecticut</u> have inspected the components described in this Owner's Report during the period <u>129</u> 06 to <u>7506</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  Commissions  Commissions  Commissions  National Board, State, Province, and Endorsements   |
| Date Wy 5, 2006  |

| 1. Owner: Southern Ca<br>Address: 2244 Waln                           |                      |                                     | ia 9177(                 | Date: 03/03                                  | /06                                   | Sheet                                  | 1 of 1                            |
|---|----------------------|-------------------------------------|--------------------------|--|---------------------------------------|--|-----------------------------------|
|   | Nuclear Generating   | Station                             |                          | Repair/Repla                                 | cement Plan: (                        | 009-06                                 |                                   |
| 3. Work Performed by:<br>Address: 2244 Waln                           |                      |                                     | _                        | Type Code S                                  | 06020298000<br>lymbol Stamp:<br>n No: | N/A<br>N/A                             |                                   |
| 4. Identification of Sys  | stem: Reactor Cool   | ant                                 |                          | Expiration D                                 | ate:                                  | N/A                                    |                                   |
| 5. (a) Applicable Cons  |                      | ME Section III, Clasign); ASME Sect |                          |  |                                       |  |                                   |
| (b) Applicable Editi  | on of Section XI Uti | ilized for Repair/R                 | eplaceme                 | ent Activity: 199                            | 5 Edition, 199                        | 6 Addenda                              |                                   |
| 6. Identification of Con  | mponents:            |                                     |                          |  |                                       |  |                                   |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No.          | National<br>Board<br>No. | Other Identifica                             | Year<br>Built                         | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| Pressurizer Heater<br>Sleeve Cap                                      | Edison               | 06020298                            | N/A                      | RSO-1360-97, Ht<br>#NX0264HG1, Lo<br>#135888 |                                       |  | No                                |
| The thermally treated<br>meeting ASME III, N<br>all surfaces using AS | VB, 1989 Edition, N  | o Addenda. After                    | completi                 | on of machining,                             | a PT examinat<br>PT-093-06).          |  | rmed on                           |
| 8. Tests Conducted: Hy  | drostatic P          | neumatic N                          |                          |  | Exempt Test Temp:                     |  | er 📆                              |

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: 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 2/16/06 described in this Owner's Report during the period , and state that to 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 National Board, State, Province, and Endorsements lhspector's Signature

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

|    |   | As Requir   | ed by the Provisio               | ns of the ASMI              | E Code Section XI  |          |                       |                   |
|----|---|---|----------------------------------|-----------------------------|--|----------|-----------------------|-------------------|
| 1. |   | er: Southern California Edison Company ress: 2244 Walnut Grove Avenue, Rosemead, CA 91770 |                                  | Date: 7/12/06               | Date: 7/12/06  |          |                       |                   |
|    |   |   |                                  |                             | Unit: 2  |          |                       |                   |
| 2. | Plant: Welding Sen  | rvices, Inc.  |                                  |                             |  |          | <b></b>               |                   |
|    | Address: 2225 Sky   | yland Court, No   | orcross, GA 300                  | 71                          |  | 6, 007-0 | 06, 008-06, 013       |                   |
| 3. | Work Performed by<br>Address: 2244 Wali                   |   |                                  |                             |  |          | e Metal Repair        |                   |
| 4. | Identification of Sys                                     | stem: Reactor (   | Coolant System                   | (1201)                      | MO/CWO: 06020365, 060203<br>06020367001, 06020368, 06020<br>06030624, 06030720 |          |                       | •                 |
|    |   |   |                                  |                             | Type Code S  |          | -                     | I/A               |
|    |   |   |                                  |                             | Authorizatio   |          |                       | I/A               |
| 5. | (a) Applicable Con  | struction Code  | : ASME Sectio                    | n III, Class 1              | Expiration D<br>, 1971 Edition, S  |          | _                     | I/A<br>(vessel)   |
| 6. | (b) Applicable Edit Pressure testing Identification of Co | ion of Section performed per l  | XI Utilized for<br>IWA-4540, 199 | Repairs/Re<br>8 Edition, 20 | placement Activ<br>000 Addenda .   | ity: 199 | 5 Edition; 1996       |                   |
|    |   | 1   |                                  | 1                           |  |          | Corrected,            | ASME              |
|    | Name of   | Name of   | Manufacturer                     | National                    | Other  | Year     | Removed, or           | Code              |
|    | Component   | Manufacturer  | Serial No.                       | Board No.                   | Identification   | Built    | Installed             | Stamped<br>Yes/No |
|    | Pressurizer Vessel  | CE  | CE 70602                         | 21495                       | S21201ME087  | 1976     | See<br>Description of | 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.

Work below

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

| 8. | Tests Cond | ducted: 1 | Hydrostatic: | Pneumatic:_ | _ Nominal | <b>Operating Press</b> | sure: X | Exempt: | Other:_ |
|----|------------|-----------|--------------|-------------|-----------|------------------------|---------|---------|---------|
|    | Pressure:_ | >= 2250   | )psi         | Test Temp:  | >= 280    | °F                     |         |         |         |

9.

| (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: 7/13/66 Owner or Owner's Designee, Title   |  |  |  |  |  |
| CERTIFICATE OF INSPECTION  |  |  |  |  |  |
| I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>California</u> , and employed by <u>HSBCT</u> of <u>Hartford</u> , <u>CT</u> have inspected the components described in this Owner's Report during the period <u>2/6/06</u> to <u>7/13/06</u> , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. |  |  |  |  |  |
| By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.  Commissions  Commissions   |  |  |  |  |  |
| Inspector's Signature (National Board, State, Province, and Endorsements)  |  |  |  |  |  |
|  |  |  |  |  |  |

#### Sheet 2 of 2

# SUPPLEMENTAL SHEET TO NIS-2 FORM

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.

4.

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)

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

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<br>Component | Name of<br>Manufacturer | Manufacturer<br>Serial No. | National<br>Board No. | Other<br>Identification | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
|----------------------|-------------------------|----------------------------|-----------------------|-------------------------|---------------|--|-----------------------------------|
| Pressurizer Vessel   | CE                      | CE 70602                   | 21495                 | S21201ME087             | 1976          | See<br>Description of<br>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 ½ in. x 11 inc.,

(2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is record the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

AN 1/13/0

| 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 I                | Plan: C         | GEN-207B                               |                                   |
| 3. Work Performed by: Southern California Edison Company<br>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |                               |                            | MO/CWO: 0602088  Type Code Symbol So Authorization No: | tamp:                                       | N/A<br>N/A      |  |                                   |
| 4. Identification of System: Reactor Coolant Expiration Date:   |                               |                            |  |   | •               | N/A                                    |                                   |
| 5. (a) Applicable Const   | truction Code: ASN            | ME Section III, Cla        | ss 1, 197  | 1 Edition, Winter 1973 A                    | ddend           | <u>a.</u>                              |                                   |
| (b) Applicable Edition  | on of Section XI Uti          | llized for Repair/Re       | eplaceme   | ent Activity: 1995 Edition                  | n <u>, 1996</u> | 5 Addenda                              |                                   |
| 6. Identification of Con  | nponents:                     |                            |  |   |                 |  |                                   |
| Name of Component   | Name of Manufacturer          | Manufacturer<br>Serial No. | National<br>Board<br>No.                               | Other Identification                        | Year<br>Built   | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| CEDM #56 Vent Valve<br>Assembly   | ABB Combustion<br>Engineering | 1370-172                   | N/A  | S21104CEDM #56                              | 1978            | Corrected                              | Yes                               |
| Vent Stem   | ABB Combustion<br>Engineering | S/N 423, Ht.<br>#36101     | N/A  | RSO-1726-94, SA479 316                      | N/A             | Installed                              | No                                |
| 7. Description of Work Replaced the vent ste Note: VT-2 examina   | m on S21104CEDN               |                            | •  | with an in-kind replacement                 | nt.             |  |                                   |
|   |                               |                            |  |   | •               |  |                                   |
| 8. Tests Conducted: Hyd   | drostatic P                   |                            |  | perating Pressure X E<br>≥ 2250 psi Test Te | xempt<br>emp: 1 |  | ar                                |

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:

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 1/5/06, 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 confected with this inspection.

MANGIA DE LA COMPANIA DEL COM

Commissions

National Board, State, Province, and Endorsements

Date July 5, 2006

| Address: 2244 Walnut Grove Avenue Posemend California 01770  |  |  |                                     | <b>)</b> .             | Date: 06/21/06<br>Unit: 2       |                  | Sheet 1 of 1   |                                   |  |
|--|--|--|-------------------------------------|------------------------|---------------------------------|------------------|--|-----------------------------------|--|
| 2. Plant: San Onofre Address: P.O. Box 1   | Nuclear Generating<br>28, San Clemente, C                      |  | )128                                | Repair                 | :/Replacement F                 | 0                | ASME SECTIO<br>DATA-0249,<br>060200789-04,<br>050500093-03 |                                   |  |
| 3. Work Performed by:  | Southern Californ  | ia Edison Compan   | у                                   | MO/C                   | WO: 06020934<br>0506197         |                  | 06021043000,   |                                   |  |
| Address: 2244 Waln   | ut Grove Avenue, R   | osemead, Californ  | ia 91770                            | , .                    | Code Symbol Strization No:      | -                | N/A<br>N/A   |                                   |  |
| 4. Identification of Sys   | stem: Reactor Cool   | ant  |                                     | Expira                 | ation Date:                     | •                | N/A  |                                   |  |
| 5. (a) Applicable Const  | truction Code: ASN 80.   | ME Section III, Cla  | ss 1, 197                           | 1 Edition,             | Summer 1973 A                   | Adden            | da and SO23-   | <u>408-1-1-</u>                   |  |
| (b) Applicable Edition   | on of Section XI Uti   | lized for Repair/R   | eplaceme                            | ent Activity           | y: <u>1995 Editior</u>          | <u>1996</u>      | 6 Addenda  |                                   |  |
| 6. Identification of Con   | nponents:  |  |                                     |                        |                                 |                  |  |                                   |  |
| Name of Component  | Name of Manufacturer   | Manufacturer<br>Serial No.                                     | National<br>Board<br>No.            | Other 1                | Identification                  | Year<br>Built    | Corrected,<br>Removed, or<br>Installed                     | ASME<br>Code<br>Stamped<br>Yes/No |  |
| 2" 1513# Y-Type Globe<br>Valve   | Kerotest   | MA2-13   | N/A                                 | S21201M                | U129                            | 1976             | Corrected  | Yes                               |  |
| Disc   | Kerotest   | ABH23-11   | N/A                                 | RSO-2-P-               | 1372-83                         | 1983             | Installed  | Yes                               |  |
| 7. Description of Work   | ::   |  | <u>!</u>                            | l                      |                                 | 1                | <u> </u>   | <u></u>                           |  |
| Valve in plant location iterations. MO 05050 cover seal weld. The body to cover seal we that was installed on the cover seal we that was installed on the cover seal we co | 0715 replaced the d<br>LLRT retest failed<br>eld and MO 060209 | isc with a replacen<br>and the valve requ<br>34001 replaced th | nent disc<br>iired rew<br>e disc wi | and MO 0<br>ork. MO 0  | 5061975 remov<br>06021043 remov | ed and<br>ved an | d reinstalled the  | ie body to<br>lled the            |  |
| Note: Pressure Testin  | ng/VT-2 performed  | per procedure SO   | 23-XVII                             | -3.1.1.                |                                 |                  |  |                                   |  |
|  |  |  |                                     |                        |                                 |                  |  |                                   |  |
|  |  |  |                                     |                        |                                 |                  |  |                                   |  |
|  |  |  |                                     |                        |                                 |                  |  |                                   |  |
|  |  |  |                                     |                        |                                 |                  |  |                                   |  |
| 8. Tests Conducted: Hyd  | drostatic P  | \ <del></del> -  |                                     | perating Pr<br>≥2250 p |                                 | Exempt           |  | er                                |  |

| (Applicable Manufa   | icturer's Data Reports to be attached)  |
|--|---|
| CERTIFIC   | CATE OF COMPLIANCE  |
| I certify that the statements made in the report are c Code, Section XI.   | correct and that this conforms to the requirements of the ASME  |
| 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: 2/5/06  |
|  | TE OF INSERVICE INSPECTION  |
| the State or Province of <u>California</u> , and employed described in this Owner's Report during the period                         | as persormed examinations and taken corrective measures described in  |
| the examinations and corrective measures describe employer shall be liable in any manner for any per connected with this inspection. | or his employer makes any warranty, expressed or implied, concerning ed in this Owner's Report. Furthermore, neither the Inspector nor his sonal injury or property damage or a loss of any kind arising from or ommissions |
| Inspector's Signature  | National Board, State, Province, and Endorsements   |

SUPPLEMENT SHEET FOR N-2

(17-W1-17/7) C # 7 7101

RS02-P-1372-83€ 544 69

| •   | (A)    | MANUFACTURED BY:                      | Kerotest Manufacturi | ng Corp., Pittsburgh, P | A 15222 NU-92044 Item  |
|-----|--------|---------------------------------------|----------------------|-------------------------|------------------------|
|     | (B)    | MANUFACTURED FOR                      | Southern California  | Edison Company P.O. Bo  | x 700 San Clements, CA |
|     | IDEN   | TIFICATION -                          |                      |                         | •                      |
|     | (A)    | DRAWING NO.:                          | 9911-55-(1)Z         | DRAWING PREPARED BY:    | KEROTEST MFG., CORP.   |
|     | (B)    | DESCRIPTION - SI                      | ZE 1-1/2" - 2", DISC | CASSEMBLY               |                        |
|     | (C)    | ASME CODE SECTIO                      | III NO               |                         |                        |
|     |        | EDITION 1971                          | , ADDENDA DATE Summ  | er 1973 ,CASE NO        | N/A CLASS 1            |
| SEF | ZIAL I | NO. :                                 | NAT'L BOARD          | SERIAL NO.              | NAT'L BOARD            |
|     | ABH2   | 3-2                                   | N/A                  | 14                      |                        |
|     | ABH2   | 3-3                                   | N/A                  | 15                      |                        |
|     | ABH2   | 3-4                                   | N/A                  | •                       |                        |
| ·   | ABH2   | 3-5                                   | N/A                  |                         |                        |
|     | ABH2   | 3-6                                   | N/A                  | 18                      |                        |
|     | ABH2   | 3-7                                   | N/A                  |                         |                        |
|     | ABH2   | 3-8                                   | N/A                  | 20                      |                        |
|     | AEH2   | 3-9                                   | N/A                  |                         |                        |
| _   |        | 3-10                                  | N/A                  |                         |                        |
|     | ABH2   | 3-11                                  | N/A                  |                         |                        |
|     | ABHZ   | 3-12                                  | Ņ/A                  |                         | ·                      |
|     |        |                                       |                      | 25                      |                        |
|     | REMAI  |                                       | SPARE PARTS FOR NUC  | LEAR VALVES             |                        |
|     |        | · · · · · · · · · · · · · · · · · · · | (2 SHEETS N-2 and S  | UPPLEMENT SHEET)        |                        |
|     |        |                                       |                      |                         |                        |
|     | SIGN   | ED: KEROTEST MFG                      | ., CORPORATION BY:   | Hery Felicite           | DATE 7/8/83            |

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\* 53 469 As required by the Provisions of the ASME Code Rules 1 of 2

| 1. (a) Manufactured by Kerotest Manufacturing Corp., Pittsburgh, PA 15222 (Name and address of Manufacturer of part)   | NII-92044 Item 42  |
|--|--|
| (b) Manufactured for Southern California Edison Company P.O. Box 700 San Cl  | lemente, CA 92672  |
| 2. Identification-Manufacturer's Serial No. of Part <u>ABH23-1</u> Nat'l Bd. No  |  |
| (a) Constructed According to Drawing No. 9911-55-(1)Z Drawing Prepared by Kerotest N   | Mfg., Corporation  |
| (b) Description of Part Inspected 1-1/2" - 2" DISC ASSEMBLY  | ·  |
| (c) Applicable ASME Code: Section III, Edition 1971, Addenda date 5/73, Case No. N/A   | Class1   |
| 3. Remarks: SPARE PARTS FOR NUCLEAR VALVES (Srief duscription of service for which component was designed)   |  |
| (2 SHEETS N2 & SUPPLEMENT SHEETS)  |  |
|  |  |
|  |  |
| We certify that the statements made in this seport are correct and this vessel part or appurtenance as a forms 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 Manufa Manufacturer is responsible for turnishing a separate Design Specification and Stress Report if the appuint the component Design Specification and Stress Report.) | acturer. An appurtenance   |
| Date July 8. 19 83 Signed Kerrotest Mfg., Corporation, House   | telietti_  |
| (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 Pressu   | re Vessel Inspectors   |
| and/or the State or Province of Perrisylvania and employed by HSB I&I COMPA of HARTFORD, CONNECTICUT have inspected the part of a pressure vess  |  |
| Manufacturer's Partial Data Report on  | or implied, concern-<br>ctor nor his employer<br>ing from or connected |
| Date 7/11/83 19  |  |
| Inspector's Signature Commissions FA2/87 National Board, State, Pr   | rovince and No.  |

<sup>\*</sup>Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is \$\frac{3}{2}" \times 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".

| Address: P.O. Box 1 3. Work Performed by: Address: 2244 Waln 4. Identification of Sys 5. (a) Applicable Const  | Nuclear Generating 28, San Clemente, C Southern Californ ut Grove Avenue, R stem: Reactor Cooleraction Code: ASN Sect   | osemead, Californ Station California 92674-0 ia Edison Compan osemead, Californ ant ME Section III, Class ion III, Class 2, 19      | 0128<br>y<br>ia 91770<br>ss 1 (NB<br>74 Ed., 9                                    | MO/CWO: 0602144   | \$8001<br>Stamp: 1<br>1971 A<br>le Case                                | 51100503-55<br>N/A<br>N/A<br>N/A<br>N/A<br>add. (vessel);<br>: N-192 and                                | ASME   |
|--|---|---|---|---|--|---|--|
| 6. Identification of Cor   | nponents:   |   |   |   |  |   |  |
| Name of Component  | Name of Manufacturer  | Manufacturer<br>Serial No.  | National<br>Board<br>No.  | Other Identification  | Year<br>Built  | Corrected,<br>Removed, or<br>Installed  | ASME<br>Code<br>Stamped<br>Yes/No                        |
| Pressurizer Vessel   | CE  | CE70602   | 21495   | S21201ME087   | 1976   |   | Yes  |
| Lower Level Instrument<br>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  |
| includes valve S2120 refueling outage. The dimensionally and perinsert assembly during basis for acceptance (ASME III, Code Classian Code Clas | nsert assembly remoderate assembly remoderate assembly removal from the after the areas were ass 2) was also replaisert assembly was indicate on separate docum | stalled after a new ichined the weld print ination of the new vessel. AR assignated and PT exceed with a new rejustalled in the 2LT | vessel no<br>rep that a<br>ly machi<br>ment 05<br>kamined.<br>placemer<br>-0110-2 | ower level instrument local<br>ozzle was installed at that<br>attaches to the vessel nozz<br>ned area. Some gouges we<br>1100503-58 evaluated thin.<br>The flexhose on the down<br>at in accordance with Well<br>location of the Pressurize<br>1579). | location<br>cle, inspected ground<br>s condi<br>constreased<br>d recor | n during R2C<br>bected the noz<br>bund into the ra-<br>tion and proven<br>m side of the<br>rd WR2-06-08 | 14<br>zzle<br>nozzle<br>rided a<br>root valve<br>32. The |
| 8. Tests Conducted: Hy   | drostatic P   | h   |   |   | Exempt   | Oth   | er :   |

|   | _         |           |
|---|-----------|-----------|
| Λ | Remarks:  | <b>X1</b> |
| ч | K PMarke. | NODE      |
|   |           |           |

(Applicable Manufacturer's Data Reports to be attached)

| CER | RTIFIC | ATE | OF           | CON | T. I.T. | ANCE |
|-----|--------|-----|--------------|-----|---------|------|
|     |        |     | $\mathbf{v}$ |     |         | ruve |

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

Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 4

# 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 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

National Board, State, Province, and Endorsements

|  | <del></del>                                  |                                   |                          |                                 |  |                 |  |                                   |  |
|--|--|-----------------------------------|--------------------------|---------------------------------|--|-----------------|--|-----------------------------------|--|
| 1. Owner: Southern Ca<br>Address: 2244 Waln  |  |                                   | ia 91770                 | Date: 03  Unit: 2               | /09/06                                   |                 | Sheet                                  | 1 of 1                            |  |
|  |  |                                   |                          | -                               | Repair/Replacement Plan: 010-06 R1       |                 |  |                                   |  |
| <ol> <li>Work Performed by: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> </ol>                                  |  |                                   |                          | Type Cod                        | D: 06021452<br>le Symbol St<br>ation No: | amp:            | N/A<br>N/A                             |                                   |  |
| 4. Identification of Sys   | stem: Reactor Cool                           | ant                               |                          | Expiratio                       | n Date:                                  |                 | N/A                                    |                                   |  |
| 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). |  |                                   |                          |                                 |  |                 |  |                                   |  |
| (b) Applicable Editi   | on of Section XI Uti                         | lized for Repair/R                | eplacem                  | ent Activity:                   | 1995 Edition                             | <u>, 1996</u>   | 5 Addenda                              |                                   |  |
| 6. Identification of Con   | mponents:                                    |                                   |                          |                                 |  |                 |  |                                   |  |
| Name of Component  | Name of Manufacturer                         | Manufacturer<br>Serial No.        | National<br>Board<br>No. | Other Iden                      | tification                               | Year<br>Built   | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| Pressurizer  | CE   | 70602                             | 21495                    | S21201ME08                      | 7  | 1976            |  | Yes                               |  |
| INCONEL 690 Bar<br>Stock   | Coulter Steel & Forge Co.                    | Ht.<br>#NX0264HG1,<br>Lot #135888 | N/A                      | RSO-1360-97<br>02, S/N 0602     |  | N/A             |  | No                                |  |
| 7. Description of Worl Fabricated a new Pre The materials were n completed nozzle wa   | essurizer stepped over<br>nachined and NDE p | performed in accor                | dance wi                 | location 2LT-<br>ith Repair Rep | 0110-2 per S<br>lacement Pla             | CE dr<br>an 010 | awing 41116:                           | sheet 6.<br>The                   |  |
|  |  |                                   |                          |                                 | ·  |                 |  |                                   |  |
|  |  |                                   |                          |                                 |  |                 |  | ÷                                 |  |
| ·  |  |                                   |                          | ·                               |  |                 | •                                      |                                   |  |
|  |  | ·                                 |                          |                                 |  |                 |  |                                   |  |
|  |  |                                   |                          |                                 |  | •               | •                                      |                                   |  |
| 8. Tests Conducted: Hy   | vdrostatic P                                 | La                                | Nominal (<br>ressure:    | Operating Press N/A psi         | ure F                                    | Exempt          |  | er                                |  |

| (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: 4/10/06   |
| 7   |
| 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.  Commissions  1574  California  * I  National Board, State, Province, and Endorsements |
| Date Uly 5 2006   |

| Address: 22/1/2 Walnut Grove Avenue Rosemend California 01770   |                      |                            |                          | Date: 07/0                   | 04/06  | Sheet                                  | 1 of 1                            |  |
|---|----------------------|----------------------------|--------------------------|------------------------------|--|--|-----------------------------------|--|
|   |                      |                            |                          | Unit: 2                      | Unit: 2 Repair/Replacement Plan: GEN-250                               |  |                                   |  |
| 3. Work Performed by: Southern California Edison Company Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  |                      |                            |                          | Type Code                    | MO/CWO: 06030450000  Type Code Symbol Stamp: N/A Authorization No: N/A |  |                                   |  |
| 4. Identification of System: Main Steam Expiration Date: N/A  |                      |                            |                          |                              |  |  |                                   |  |
| 5. (a) Applicable Construction Code: ASME Section III, Class 2 (NF), 1974 Edition, Summer 1974 Addenda and Design Specification SO23-409-2.   |                      |                            |                          |                              |  |  |                                   |  |
| (b) Applicable Edition  | on of Section XI Uti | lized for Repair/R         | eplaceme                 | ent Activity: 19             | 995 Edition, 1990  | 6 Addenda                              |                                   |  |
| 6. Identification of Cor  | nponents:            |                            |                          |                              |  |  |                                   |  |
| Name of Component   | Name of Manufacturer | Manufacturer<br>Serial No. | National<br>Board<br>No. | Other Identif                | Tication Year<br>Built   | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| Mechanical Snubber<br>PSA-100-6"  | Pacific Scientific   | S/N 2340                   | N/A                      | S2ST001H021                  | 1985   | Removed                                | No                                |  |
| Mechanical Snubber<br>PSA-100-6"  | Pacific Scientific   | S/N 2336                   | N/A                      | RSO-2503-05,<br>1801119-09   | P/N 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: Hy  | drostatic P          |                            | Nominal C                | Operating Pressur<br>N/A psi | e Exempt   |  | er                                |  |

| (Applicable  | Manufacturer's Data Reports to be attached)  |
|--|--|
| CERT   | TFICATE OF COMPLIANCE  |
| I certify that the statements made in the report a Code, Section XI.                                     | are correct and that this conforms to the requirements of the ASME   |
| Type Code Symbol Stamp: N/A  |  |
| Certificate of Authorizaton No: N/A  | Expiration Date: N/A   |
| Signed: Owner's Designee, Title  | —Supervising ASME Codes Engineer Date: 7/5/06  |
| CERTIFI  | CATE OF INSERVICE INSPECTION   |
| the State or Province of <u>California</u> , and empl<br>described in this Owner's Report during the per | er has performed examinations and taken corrective measures described in   |
| the examinations and corrective measures desc  | or nor his employer makes any warranty, expressed or implied, concerning cribed in this Owner's Report. Furthermore, neither the Inspector nor his y personal injury or property damage or a loss of any kind arising from or  Commissions  1574  California |
| Inspector's Signature  | Commissions 17/4 California N L National Board, State, Province, and Endorsements  |
| Date 7/6/06  |  |

| FURM N   | 18-2 OWNER'S          | AS Required by the Provisions |                          |                             |   | (1 A          | CHVIIY                                 |                                   |
|--|-----------------------|-------------------------------|--------------------------|-----------------------------|---|---------------|--|-----------------------------------|
| Owner: Southern California Edison Company     Address: 2244 Walnut Grove Avenue, Rosemead, California 91770  |                       |                               |                          |                             | 07/07/06 <sup>-</sup><br>2  |               | Shee                                   | t 1 of 1                          |
| <ol> <li>Plant: San Onofre Nuclear Generating Station<br/>Address: P.O. Box 128, San Clemente, California 92674-0128</li> <li>Work Performed by: Southern California Edison Company<br/>Address: 2244 Walnut Grove Avenue, Rosemead, California 91770</li> <li>Identification of System: Auxiliary Feedwater System</li> </ol> |                       |                               |                          | MO/CV Type C Author Expirat | Repair/Replacement Plan: 060400097-37  MO/CWO: 06040517000 06040160000  Type Code Symbol Stamp: N/A |               |  |                                   |
| <ul><li>5. (a) Applicable Cons</li><li>(b) Applicable Editi</li><li>6. Identification of Cons</li></ul>  | on of Section XI Uti  |                               |                          |                             |   |               |  |                                   |
| Name of Component  | Name of Manufacturer  | Manufacturer<br>Serial No.    | National<br>Board<br>No. | Other Id                    | lentification .   | Year<br>Built | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |
| 4" 900# Y-Globe Lift<br>Check Valve  | Atwood & Morrill      | 1-16188-01                    | N/A                      | S21305MU                    | 124   | 1991          | Соггестед                              | 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   | X Exempt Other  |       |
|--|--|--|---|-------|
|  | See: AR 060400097-06   | Pressure: ≥999 psi   | Test Temp: N/A °F   |       |
| Note: Supplemental sheets i<br>sheet, (3) each sheet i | in the form of lists, sketches, or drawings may be used prov<br>s numbered and the number of sheets is recorded at the top | ided (1) size is 8 1/2 in. x 1 1 in., (2) informa<br>of this form, and (4) each sheet is initialed a | ation in Items 1 through 6 on this report is included o<br>and dated by the Owner or Owner's designee and the | n eac |

| 9. | Rem | arks: |
|----|-----|-------|
|    |     |       |

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

Owner or Owner's Designee, Title

|  | ASME Codes Engineer Date: 7/8/06   |
|--|--|
| Owner or Owner's Designee, Title   |  |
|  |  |
| CERTIFICATE OF INSER   | CVICE INSPECTION   |
| I, the undersigned holding a valid commission issued by the Na the State or Province of <u>California</u> , and employed by <u>HSBCT</u> described in this Owner's Report during the period <u>HSBCT</u> the best of my knowledge and belief, the Owner has performed this Owner's Report in accordance with the requirements of the | of Hartford, Connecticut have inspected the components to 17700, and state that to examinations and taken corrective measures described in |
| By signing this certificate, neither the Inspector nor his employ<br>the examinations and corrective measures described in this Own<br>employer shall be liable in any manner for any personal injury<br>connected with this inspection.   | ner's Report. Furthermore, neither the Inspector nor his   |
| Commissions  | 1574-California N&I National Board, State, Province, and Endorsements  |
| Date 7/12/010  |  |

| 1. Owner: Southern Ca   |  |  | _                        | Date: 07/07/06   |                  | Sheet                                  | 1 of 1                            |  |
|---|--|--|--------------------------|--|------------------|--|-----------------------------------|--|
|   | Nuclear Generating                       | Station                                |                          | Unit: 2 Repair/Replacement Plan: 060400097-40                          |                  |  |                                   |  |
| Address: P.O. Box 1 3. Work Performed by: Address: 2244 Waln 4. Identification of Sys | Southern Californ<br>out Grove Avenue, R | ia Edison Compan<br>cosemead, Californ | у                        | MO/CWO: 0604051  Type Code Symbol S Authorization No: Expiration Date: | tamp:            | N/A<br>N/A<br>N/A                      |                                   |  |
|   | •  | -                                      | ss 2, 197                | 4 Edition, Summer 1974   |                  |  |                                   |  |
| <ul><li>(b) Applicable Edition</li><li>6. Identification of Contraction</li></ul>     |  | ilized for Repair/R                    | eplaceme                 | ent Activity: 1995 Edition   | n <u>, 199</u> 0 | 5 Addenda                              |                                   |  |
| Name of Component   | Name of Manufacturer                     | Manufacturer<br>Serial No.             | National<br>Board<br>No. | Other Identification   | Year<br>Built    | Corrected,<br>Removed, or<br>Installed | ASME<br>Code<br>Stamped<br>Yes/No |  |
| 4" 900# Y-Globe Lift<br>Check Valve   | Atwood & Morrill                         | 2-16188-01                             | N/A                      | S21305MU448  | 1991             | Corrected                              | Yes                               |  |
| Poppet  | Weir Valve &<br>Controls                 | S/N 2                                  | N/A                      | RSO-0706-06, SA479 304   |                  | Installed                              | Yes                               |  |
| 7. Description of Work<br>Replaced poppet in the<br>accordance with RRI               | he check valve in pla                    |  |                          | 3 with one made of solid S   | A479             | -304 stainless                         | steel in                          |  |
| · .   |  | ·                                      |                          |  |                  |  |                                   |  |
|   |  |  |                          | •  |                  |  | ·                                 |  |
|   |  |  |                          | ·  |                  |  |                                   |  |
| 8. Tests Conducted: Hy  | drostatic P                              |  |                          | operating Pressure X I   |                  |  | er 🔲                              |  |

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: 7/0/06

Owner or Owner's Designee, Title

# Supervising ASME Codes Engineer 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 18 DO 17 TOO 19 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 CA 1574 California National Board, State, Province, and Endorsements Date Date 1. Province in the components of Hartford, Connecticut have inspectors and the components of Hartford, Connecticut have inspectors and state that to the best of my knowledge and belief, the Components of Hartford, Connecticut have inspectors and state that to the best of Hartford, Connecticut have inspectors and state that to the best of Hartford, Connecticut have inspectors and the components of Hartford, Connecticut have inspectors and the state of Hartford, Connecticut have inspectors and the state of Hartford, Connecticut have inspectors and the components inspector of Hartford, Connecticut have inspector of Hartford, C

| Owner: Southern California Edison Company     Address: 2244 Walnut Grove Avenue, Rosemead, California 91770 |   |   | Date: 01/09/06<br>Unit: 2                                    |   | Sheet 1 of 1                            |   |                                   |
|---|---|---|--|---|---|---|-----------------------------------|
| <ol> <li>Plant: San Onofre<br/>Address: P.O. Box 1</li> <li>Work Performed by:</li> </ol>                   | Repair/Replacement MO/CWO: 9804192  | Repair/Replacement Plan: 980402408-6, GEN-239<br>MO/CWO: 98041924003                                    |  |   |   |   |                                   |
| Address: 2244 Waln  | Authorization No:   |   |  |   |   |   |                                   |
| 4. Identification of Sys  |   |   |  | Expiration Date:  |   | N/A   | _                                 |
| 5. (a) Applicable Const   | truction Code: ASM<br>Non   |   | iss 2 (NC  | ), 1974 Edition, Summer   | <u>1974 A</u>                           | Addenda; Coc                                      | ie Case:                          |
| (b) Applicable Edition  | on of Section XI Uti  | lized for Repair/R  | eplaceme   | ent Activity: 1995 Editio   | n, 1996                                 | 6 Addenda   |                                   |
| 6. Identification of Cor  | nponents:   |   |  |   |   |   |                                   |
| Name of Component   | Name of Manufacturer  | Manufacturer<br>Serial No.  | National<br>Board<br>No.                                     | Other Identification  | Year<br>Built                           | Corrected,<br>Removed, or<br>Installed            | ASME<br>Code<br>Stamped<br>Yes/No |
| 10" 300# Flange<br>Connection   | Allegheny Ludlum  | 2-RC-134-006  | N/A  | S21201ML134   | N/A                                     | Corrected   | Yes                               |
| 1"-8 x 36" All Thread<br>Stud (4)   | Mackson, Inc  | Ht. #G9316  | N/A  | RSO-1278-05, SA564 gr.<br>630   | N/A                                     | Installed   | No                                |
| 1"-8 Heavy Hex Nuts<br>(19)   | Mackson, Inc  | Ht. #542535, Ht.<br>Code BFB  | N/A  | RSO-1593-05, SA564 gr.<br>630   | N/A                                     | Installed   | No                                |
| 1"-8 Heavy Hex Nuts<br>(13)   | Mackson, Inc  | Ht. #527282   | N/A  | RSO-1593-05, SA564 gr.<br>630   | N/A                                     | Installed   | No                                |
| S21201MU033 to be<br>and Hex Nuts (Items<br>corrosion resistant S.<br>each nuts were replace                | aterial for the specta<br>e degraded and in ne<br>2 & 3, resp., on S2-<br>A-564 Type 630 Co<br>ced. (16) each repla<br>to the cut pieces in | ed of replacement<br>-1219-ML-007, Sh<br>ndition H1100 in a<br>accement studs were<br>accordance with F | . The m<br>a. 1) from<br>accordan<br>e cut to 8<br>Repair Re | of Unit 2 Return from Spaterial was upgraded for to low alloy steel (SA-193 ce with ECP 980402408-1/2" lengths from all-throplacement Plan GEN-239 ure. | he spec<br>Grade :<br>8. (16)<br>ead ma | ctacle flange of<br>B7) to the mo<br>each studs a | Stud Bolts<br>ore<br>nd (32)      |
| 8. Tests Conducted: Hy  | rdrostatic P  | <u></u>   | Nominal (<br>Pressure:                                       |   | Exempt                                  |   | ner X                             |

| (Applicable Manufacturer's Data Reports to be attached)   |   |  |  |  |  |
|---|---|--|--|--|--|
| CERTIFICATE OF COMPLIANCE   |   |  |  |  |  |
| I certify that the statements made in the re<br>Code, Section XI.   | eport are correct and that this conforms to the requirements of the ASME  |  |  |  |  |
| Type Code Symbol Stamp: N/A   |   |  |  |  |  |
| Certificate of Authorizaton No: N/A   | Expiration Date: N/A  |  |  |  |  |
| Signed:   | Supervising ASME Codes Engineer Date: Z/13/0 C  |  |  |  |  |
| /   |   |  |  |  |  |
| CE  | RTIFICATE OF INSERVICE INSPECTION   |  |  |  |  |
| the State or Province of <u>California</u> , and described in this Owner's Report during the best of my knowledge and belief, the | ission issued by the National Board of Boiler and Pressure Vessel Inspectors and Lemployed by HSBCT of Hartford, Connecticut have inspected the components the period, and state that to connect has performed examinations and taken corrective measures described in the requirements of the ASME Code, Section XI. |  |  |  |  |
| the examinations and corrective measure   | spector nor his employer makes any warranty, expressed or implied, concerning es described in this Owner's Report. Furthermore, neither the Inspector nor his for any personal injury or property damage or a loss of any kind arising from or  |  |  |  |  |
| Inspector's Signature   | Commissions 8025 NET California 1812 National Board, State, Province, and Endorsements  |  |  |  |  |
| Date ////////////////////////////////////   |   |  |  |  |  |