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Richard J. St. Onge
Director
Nuclear Regulatory Affairs

May 17, 2011

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Subject: **Docket No. 50-362**
Owner's Report of Inservice Inspection, Form NIS-1
San Onofre Nuclear Generating Station, Unit 3

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

Dear Sir or Madam:

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 3. This report covers the period from December 19, 2008 to February 18, 2011, the date Unit 3 returned to service following its Cycle 16 refueling outage.

If you have any questions or require additional information, please contact me or Mr. Ryan Treadway at (949) 368-9985.

Sincerely,

Enclosure: Inservice Inspection Summary Report

A047
NRR

P.O. Box 128
San Clemente, CA 92674

cc: E. E. Collins, Regional Administrator, NRC Region IV
R. J. Caniano, Director, Division of Reactor Safety, NRC Region IV
R. Hall, NRC Project Manager, San Onofre Units 2 and 3
G. G. Warnick, 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

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SAN ONOFRE
NUCLEAR GENERATING STATION
UNIT-3

3rd INTERVAL, 2nd PERIOD
REFUELING OUTAGE-16

INSERVICE INSPECTION
SUMMARY REPORT

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ATTACHMENTS

4 Attachment-1, ISI Plan & Schedule for the third interval Including number and percentage of Examinations and Tests completed

5 Attachment-2, List of Code Class 1 and 2, ISI Examinations and Tests Completed

6 Attachment-3, Abstract and Form NIS-2 Owner's Report for Repair/Replacement Activity

1 SUMMARY REPORT

Date of Document Completion.....May 9, 2011

Name & Address of Plant:

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

Number Designation of the Unit.....Unit 3
Commercial Service Date for the Unit.....March 27, 1984
Interval.....Third Ten Year ISI Interval
Period.....Second Period
Refueling Outage Number.....16

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

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

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

2. **Plant:** San Onofre Nuclear Generating Station
5000 Pacific Coast Hwy
San Clemente, CA 92672

3. **Plant Unit:** 3

4. **Owner's Certificate of Authorization:** N/A

5. **Commercial Service Date:** 3/27/84

6. **National Board Number for Unit:** N/A

7. **Components Inspected:**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial Number	State or Province Number	National Board Number
Reactor Vessel 3MV001	Combustion Engineering	72170	35204-82	22001
Pressurizer 3ME087	Combustion Engineering	70603	35204-82	21496
Reactor Coolant Pump 3MP003	Byron Jackson	701-N-0561	N/A	N/A
Steam Gen 3ME088	Mitsubishi Heavy Industries	B-SGP-113	Kobe, Japan	5865
Steam Gen 3ME089	Mitsubishi Heavy Industries	B-SGP-112	Kobe, Japan	5864

FORM NIS-1 (back)

8. **Examination Date:** December 19, 2008 to February 18, 2011
9. **Inspection Period Identification**: _____ 1st Period__X__2nd Period____3rd Period
10. **Inspection Interval Identification:** ___1st 10-Yr___2nd 10-Yr__X__3rd 10-Yr___4th 10-Yr
11. **Applicable Edition of Section XI...** IWB, IWC, IWD,IWF, 1995 Edition, with the 1996 Addenda , IWE, IWL 2001 Edition with 2003 Addenda,
12. **Date/Revision of Inspection Plan...** August 18, 2003, Doc # 90074, Rev 0
13. **Abstract of Examinations & Tests**.....See page 5
14. **Abstract of Results of Examinations & Tests:**.....See page 6
15. **Abstract of Corrective Measures:**.....See page 6

We certify that a) the statements 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

WJC 5/9/11

Date: ~~5/6/2011~~ 5/9/2011 GJ **Signed:** Southern California Edison **By:**
(Owner) Manager, Engineering Programs

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 December 19, 2008 to February 18, 2011, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

WAZCMg Commissions NB13402-A,N,I CA2093
Inspector's Signature NB, State, Province or Endorsements

Date: 5/9/11

ABSTRACT OF EXAMINATIONS & TESTS

Inservice Examinations and Tests required per ASME Section XI Code (Code) and 10CFR 50.55a for the third interval 2nd Period were scheduled and completed. Attachment 1 provides the status of work completed for the inspection interval. Attachment 2 provides the listing of inservice examinations and tests performed from December 19, 2008 to February 18, 2011.

Steam Generators with component identification numbers ME-088 and ME-089 were replaced during the outage and the required Preservice examinations were scheduled and completed.

ABSTRACT OF RESULTS OF EXAMINATIONS AND TESTS AND CORRECTIVE MEASURES

Results of all the scheduled Inservice examinations/tests and Preservice examinations/tests including replaced steam generators were acceptable. No flaws were detected during examination or tests performed hence corrective measures were not required.

2 STEAM GENERATOR EXAMINATIONS

Replacement Steam Generator Tubing Preservice Examinations

Preservice Examinations of the tubing in the two Replacement Steam Generators were performed in accordance with:

- Conformed Specification for Design and Fabrication of the Replacement Steam Generators for Unit 2 and Unit 3, San Onofre Nuclear Generating Station, Southern California Edison Document Number SO23-617-01, and

- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI (Rules for Inservice Inspection of Nuclear Power Plant Components), 1995 Edition and 1996 Addenda.

The components examined were:

- Tubing in Replacement Steam Generator S3.RCPS.S31301ME088P
- Tubing in Replacement Steam Generator S3.RCPS.S31301ME089P

The components are Code Class 1.

The Code Examination Category was B-Q (Steam Generator Tubing) and the Item Number was B16.20 (Steam Generator Tubing in U-Tube Design).

The examination method was "eddy current".

There were no Code Cases.

The below table summarizes the scope of inspections performed on each Steam Generator (SG).

Inspection Scope	SG E-088 Tubes/Percent	SG E-089 Tubes/Percent
Full length of tubes with the bobbin probe	9727/100%	9727/100%
Full length of tubes within the hot leg tubesheet to an extent of 3 inches above the tubesheet with the rotating plus point coil probe	9727/100%	9727/100%
Full length of tubes within the cold leg tubesheet to an extent of 3 inches above the tubesheet with the rotating plus point coil probe	9727/100%	9727/100%
U-bend regions of tubes in Rows 1 through 15 with the rotating plus point coil probe	1314/100%	1314/100%

No active degradation mechanisms were found.

Nondestructive examination techniques utilized for the degradation mechanism of mechanically-induced wear of tubing included the bobbin probe and rotating plus point coil probe. The rotating plus point probe, which is capable of signal characterization, was used on a representative sample of conditions observed to provide a basis for historical comparisons in the future.

No indications of tubing degradation were found.

No tube plugging was recommended. No tubes were plugged. These two steam generators do not have any tubes plugged as of the date of this report.

Condition Monitoring was not applicable to these preservice examinations. There are no results of corrective actions such as tube pulls (i.e., tube removals) and in-situ pressure testing of tubing, because they were not needed and not performed.

Associated records are archived in Southern California Edison Corporate Document Management.

3 REACTOR VESSEL HEAD EXAMINATIONS IN ACCORDANCE WITH 10CFR50.55(a)(g)(6)(ii)(D)

Inspection Requirement

Bare Metal Visual examination of the exterior surface of Class 1 SONGS Unit-3 Reactor Vessel Head; Item number B4.10 of Code Case N-729-1.

The entire outer surface as defined in figure 1 of Code case N-729-1 was examined in accordance with 10CFR50.55(a)(g)(6)(ii)(D). No unacceptable indications were identified.

Inspection Requirement

A combination of Volumetric or Surface examinations of all Class 1, SONGS Unit-3 reactor vessel head penetrations; items B4.20 of Code Case N-729-1 were performed in accordance with 10CFR50.55(a)(g)(6)(ii)(D). SCE relief request ISI-3-29 from CEDM coverage requirements specified in Code case N-729-1 was approved by NRC letter dated December 22, 2009, and SCE relief request ISI-3-30 from Incore Instrument penetration coverage requirements specified in Code case N-729-1 was approved by NRC letter on July 13, 2010.

A total of ninety-one (91) CEDM penetrations, ten (10) Instrument penetrations and one (1) vent line penetration were examined. One hundred percent of the approved examination requirement for the one hundred and two (102) reactor vessel head penetrations was examined. No unacceptable indications were identified during those examinations.

REACTOR COOLANT PRESSURE BOUNDARY VISUAL EXAMINATIONS IN ACCORDANCE WITH 10CFR50.55(a)(g)(6)(ii)(E)

Inspection Requirement

Visual Examination of SONGS Unit-3 partial and full penetration pressure retaining welds in Class 1 components fabricated with Alloy 600/82/182 material were examined in accordance with the requirements of 10CFR50.55(a)(g)(6)(ii)(E).

Four (4) pressurizer instrument connections and sixteen (16) cold leg full penetration welds (Items B15.180 and B15.215 respectively of Code Case N-722) were visually examined. One hundred percent of the 10CFR50.55(a)(g)(6)(ii)(E) requirement was satisfied by this examination. No unacceptable indications were identified during the examinations.

4 ATTACHMENT- 1

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

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

Subsection	Category	Examinations Required, See Note-1	Period-1, See Note-2	Period-2, See Note-2	Period-3, See Note-2	Number of examinations completed during U3C16	Percentage of examinations completed for the 1st Period(U3C13 & U3C14) and 2nd Period (U3C15 and U3C16) of the 3rd Interval, See Note-3
IWB	B-A	27	3	2	22	0	19%
	B-B	5	2	1	2	1	60%
	B-D	28	10	6	12	6	57%
	B-F/B-J	98	33	45	30	45	75%
	B-G-1	248	86	54	108	0	56%
	B-G-2	177	57	81	58	41	75%
	B-K	12	4	5	3	5	75%
	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	75%
	B-M-2	See Note-4	N/A	N/A	N/A	N/A	N/A
	B-N-1	3	1	1	1	1	67%
	B-N-2	30	0	0	30	0	0%
	B-N-3	2	0	0	2	0	0%
	B-O	1	0	0	1	0	0%
	B-P	Each reactor refueling outage prior to plant startup					100%
	B-Q	Governed by the plant Technical Specification					
IWC	C-A	15	7	6	4	6	75%
	C-B	8	2	6	2	6	75%
	C-C	48	17	15	16	15	67.0%
	C-F-1	140	48	61	35	5	75%
	C-F-2	28	10	13	7	13	75%
	C-G	5	1	2	2	1	60%
	C-H	Each inspection period					100%
IWD	D-A	50	19	15	16	0	68%
	D-B	Each inspection period					100%
IWF	F-A	270	88	91	91	0	66%
IWE	E-A	207	2	2	203	0	0%, See note-5
	E-C	6	2	2	2	0	0%, See note-5
IWL	L-A	Once in every five years				50%	50%, See note-5
	L-B	Once in every five years				0	0%, See note-5
Augmented ISI for the Reactor coolant pump flywheels and high energy piping							
	Flywheels	4	0	0	4	0	0%
	High energy piping welds	19	60	0	0	0	100%
Notes : 1) Required Examinations subject to change based on							
a) Plant Modification							
b) Periodic update of Regulatory Guide 1.147, Inservice Inspection Code Case Acceptability							
ASME Section XI, Division 1							

c) Periodic update of 10CFR 50.55a Codes and Standards						
d) Approval or disapproval of relief requests submitted to the NRC in accordance with 10CFR 50.55a						
2) Number of examinations scheduled for a period may change due to						
a) Component accessibility because of high radiation or 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, repair or volumetric						
examination						
5) The second 120 months (2nd interval) for containment ISI for Subsections IWE and IWL begun on September 9,						
2008, and scheduled to end on September 8, 2018, in accordance with 10CFR 50.55a(b)(2)(vi)						
6) For Category C-H and D-B, 2nd period tests are completed.						

5 ATTACHMENT- 2

LIST OF CODE CLASS 1 AND 2, ISI EXAMINATIONS AND TESTS COMPLETED (5 Pages)

LIST OF EXAMINATIONS AND TESTS COMPLETED DUING U3C16

ISI DESIGNATION NUMBER	COMPONENT EXAMINED OR TESTED	CODE CLASS	CODE EXAMINATION CATEGORY	CODE EXAMINATION ITEM NO.	EXAMINATION OR TEST METHOD		
					VOLUMETRIC EXAMINATION	SURFACE EXAMINATION	VISUAL EXAMINATION
03-001-080	AREAS ABOVE AND BELOW REACTOR CORE	1	BN1	B13.10			VT-3
03-003-017	INLET NOZZLE INNER RADIUS	1	B-D	B3.140			ENVT
03-003-018	OUTLET NOZZLE INNER RADIUS @ 45 DEGREES	1	B-D	B3.140			ENVT
03-003-019	OUTLET NOZZLE INNER RADIUS @ 315 DEGREES	1	B-D	B3.140			ENVT
03-003-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	1	B-B	B2.40	UT		
03-003-001	SUPPORT SKIRT TO STAY RING WELD	1	B-K	B10.10		MT	
03-004-019	OUTLET NOZZLE INNER RADIUS @ 315 DEGREES	1	B-D	B3.140			ENVT
03-004-017	INLET NOZZLE INNER RADIUS	1	B-D	B3.140			ENVT
03-004-018	OUTLET NOZZLE INNER RADIUS @ 45 DEGREES	1	B-D	B3.140			ENVT
03-004-009	PRIMARY EXTENSION RING-TO-TUBE SHEET WELD	1	B-B	B2.40	UT		
03-004-001	SUPPORT SKIRT-TO-STAY BASE WELD	1	B-K	B10.10		MT	
03-005-019-04	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-05	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-06	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-07	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-08	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-09	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-10	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-11	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-12	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-13	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-14	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-15	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-16	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-01	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-02	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-019-03	PRIMARY MANWAY BOLTING (STUD)	1	BG2	B7.20			VT-1
03-005-027	SAFETY NOZZLE-TO-SAFE END WELD @ 45 DEGREES	1	B-F	B5.40	UT		
03-005-028	SAFETY NOZZLE-TO-SAFE END WELD @ 225 DEGREES	1	B-F	B5.40	UT		
03-005-029	SAFETY NOZZLE-TO-SAFE END WELD @ 315 DEGREES	1	B-F	B5.40	UT		

03-005-030	SPRAY NOZZLE-TO-SAFE END WELD	1	B-F	B5.40	UT		
03-005-031	SURGE NOZZLE-TO-SAFE END WELD	1	B-F	B5.40	UT		
03-006-009	DRAIN NOZZLE-TO PIPE	1	B-J	B9.32	UT		
03-006-001	STEAM GENERATOR #1 INLET NOZZLE EXTENSION PIECE-TO-PIPE WELD	1	B-J	B9.11	UT		
03-007-001	STEAM GENERATOR #2 INLET NOZZLE EXTENSION PIECE-TO-ELBOW WELD	1	B-J	B9.11	UT		
03-008-018	DRAIN NOZZLE-TO-PIPE WELD	1	B-J	B9.32	UT		
03-008-017	PIPE-TO-STEAM GENERATOR NOZZLE EXTENSION PIECE WELD	1	B-J	B9.11	UT		
03-008-002	SAFE END-TO-ELBOW WELD	1	B-J	B9.11	UT		
03-009-012	SAFETY INJECTION NOZZLE-TO-SAFE END WELD	1	B-J	B9.11	UT		
03-009-009	SAFETY INJECTION NOZZLE-TO-PIPE WELD	1	B-J	B9.31	UT		
03-009-002	SAFE END-TO-PIPE WELD	1	B-J	B9.11	UT		
03-010-017	PIPE-TO-STEAM GENERATOR EXTENSION PIECE WELD	1	B-J	B9.11	UT		
03-010-002	SAFE END-TO-ELBOW WELD	1	B-J	B9.11	UT		
03-011-010	PRESSURIZER SPRAY LINE NOZZLE-TO-PIPE WELD	1	B-J	B9.32	UT		
03-011-011	SAFETY INJECTION NOZZLE-TO-SAFE END WELD	1	B-J	B9.11	UT		
03-011-002	SAFE END-TO-PIPE WELD	1	B-J	B9.11	UT		
03-012-017	PIPE-TO-STEAM GENERATOR NOZZLE EXTENSION PIECE WELD	1	B-J	B9.11	UT		
03-012-002	ELBOW WELD-TO-SAFE END	1	B-J	B9.11	UT		
03-013-009	SAFETY INJECTION NOZZLE-TO-PIPE WELD	1	B-J	B9.31	UT		
03-013-011	SAFE END WELD-TO-SAFETY INJECTION NOZZLE	1	B-J	B9.11	UT		
03-013-002	SAFE END-TO-PIPE WELD	1	B-J	B9.11	UT		
03-014-017	PIPE-TO-STEAM GENERATOR NOZZLE EXTENSION PIECE WELD	1	B-J	B9.11	UT		
03-014-002	SAFE END-TO-ELBOW WELD	1	B-J	B9.11	UT		
03-015-009	SAFETY INJECTION NOZZLE-TO-PIPE WELD	1	B-J	B9.31	UT		
03-015-010	PIPE WELD-TO-SAFETY INJECTION NOZZLE	1	B-J	B9.11	UT		
03-015-002	SAFE END-TO-PIPE WELD	1	B-J	B9.11	UT		
03-016-001	12" SCH 160 NOZZLE-TO-PIPE	1	B-J	B9.11	UT		
03-017-470C	SIDE PLATE BOLTING (STUDS & NUTS) (DRAWING S023-408-1-6-216)	1	BG2	B7.70			VT-1
03-017-630C	SIDE PLATE BOLTING (DRAWING SO23-408-1-6-45)	1	BG2	B7.70			VT-1
03-017-620	3" SCH 160 PIPE-TO-VALVE	1	B-J	B9.21	UT		
03-018-530C	SIDE PLATE BOLTING (DRAWING SO23-408-1-6-45)	1	BG2	B7.70			VT-1
03-018-440C	SIDE PLATE BOLTING (STUDS & NUTS) (DRAWING NO. SO23-408-1-6-216)	1	BG2	B7.70			VT-1
03-018-430	8" SCH 140 PIPE-TO-VALVE	1	B-J	B9.11	UT		
03-019-010C	SIDE PLATE BOLTING (STUDS & NUTS)(DRAWING NO. SO23-408-1-6-46)	1	BG2	B7.70			VT-1
03-019-1010	GUIDE W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	

03-019-130	8" SCH 140 VALVE-TO-PIPE	1	B-J	B9.11	UT		
03-019-150	8" SCH 140 PIPE-TO-ELBOW	1	B-J	B9.11	UT		
03-019-020	3" SCH 160 VALVE-TO-PIPE	1	B-J	B9.21	UT		
03-020-720	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
03-020-730	Y-STOP W/INTEGRALLY WELDED LUGS	1	B-K	B10.20		PT	
03-020-530	VALVE-TO-8" SCH 140 PIPE	1	B-J	B9.11	UT		
03-020-640	3" SCH 160 PIPE-TO-CHECK VALVE	1	B-J	B9.21	UT		
03-021-450B	10" STOP VALVE LOWER BODY WELD (DRAWING SO23-507-1-5-139)	1	BM1	B12.40		PT	
03-021-450E	10" STOP VALVE UPPER BODY WELD (DRAWING NO. SO23-507-5-1-139)	1	BM1	B12.40		PT	
03-021-310B	16" STOP VALVE UPPER BODY WELD (DRAWING NO. SO23-507-5-1-37)	1	BM1	B12.40		PT	
03-025-120E	VALVE CAP BOLTING (STUDS AND NUTS)	1	BG2	B7.70			VT-1
03-025-120C	2" HEX NUTS (INLET FLANGE)	1	BG2	B7.70			VT-1
03-025-120D	VALVE BONNET BOLTING (STUDS AND NUTS)	1	BG2	B7.70			VT-1
03-025-120B	2" STUDS (INLET FLANGE)	1	BG2	B7.70			VT-1
03-026-800	2" SCH 160 PIPE-TO-REDUCING TEE	1	B-J	B9.21	UT		
03-028-030	2" SCH 160 ELBOW-TO-PIPE	1	B-J	B9.21	UT		
03-030-040	2" SCH 160 REDUCING TEE-TO-PIPE	1	B-J	B9.21	UT		
03-031-010	2" SCH 160 NOZZLE-TO-PIPE	1	B-J	B9.21	UT		
03-031-030	2" SCH 160 ELBOW-TO-PIPE	1	B-J	B9.21	UT		
03-031-060	2" SCH 160 PIPE-TO-VALVE	1	B-J	B9.21	UT		
03-033-020	2" SCH 160 PIPE-TO-ELBOW	1	B-J	B9.21	UT		
03-034-030	2" SCH 160 ELBOW-TO-PIPE	1	B-J	B9.21	UT		
03-035-089	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-090	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-091	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-092	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-093	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-094	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-095	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-080	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-081	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-082	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-083	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-084	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-085	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1

LIST OF EXAMINATIONS AND TESTS COMPLETED DUING U3C16

03-035-086	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-087	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-035-088	HEAT EXCHANGER-TO-DRIVER MOUNT STUD (DWG. NO. SO23-922-157)	1	BG2	B7.60			VT-1
03-042-008	FEEDWATER NOZZLE INSIDE RADIUS SECTION	2	C-B	C2.22	UT		
03-042-008	FEEDWATER NOZZLE-TO-SHELL WELD	2	C-B	C2.21	UT	MT	
03-043-008	FEEDWATER NOZZLE INSIDE RADIUS SECTION	2	C-B	C2.22	UT		
03-043-008	FEEDWATER NOZZLE-TO-SHELL WELD	2	C-B	C2.21	UT	MT	
03-044-440	SNUBBER W/WELDED ATTACHMENT	2	C-C	C3.20		MT	
03-044-470	SNUBBER W/WELDED ATTACHMENT	2	C-C	C3.20		MT	
03-044-420	SNUBBER W/WELDED ATTACHMENT	2	C-C	C3.20		MT	
03-044-430	SNUBBER W/WELDED ATTACHMENT	2	C-C	C3.20		MT	
03-044-070	18" SCH 100 PIPE-TO-SWEEPOLET	2	CF2	C5.81		MT	
03-044-010	18" SCH 80 NOZZLE EXTENSION-TO-ELBOW	2	CF2	C5.51	UT	PT	
03-045-360	18" SCH 80 ELBOW-TO-NOZZLE EXTENSION PIECE	2	CF2	C5.51	UT	PT	
03-046-110	6" SCH 120 PIPE-TO-VALVE	2	CF2	C5.51	UT	MT	
03-046-130	6" SCH 120 TEE-TO-PIPE	2	CF2	C5.51	UT	MT	
03-047-010	6" SCH 120 SWEEPOLET-TO-PIPE	2	CF2	C5.51	UT	MT	
03-048-350	6" SCH 80 ELBOW-TO-ELBOW	2	CF2	C5.51	UT	MT	
03-048-330	6" SCH 80 PENETRATION-TO-PIPE	2	CF2	C5.51	UT	MT	
03-048-340	6" SCH 80 PIPE-TO-ELBOW	2	CF2	C5.51	UT	MT	
03-050-010	42" ELBOW-TO-STEAM GENERATOR NOZZLE WELD	2	CF2	C5.51	UT	MT	
03-051-010	42" ELBOW-TO-STEAM GENERATOR NOZZLE WELD	2	CF2	C5.51	UT	MT	
03-053-290	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT	MT	
03-053-300	HEADER EXTRUSION-TO-6" PIPE	2	CF2	C5.51	UT	MT	
03-061-330	12" CONTROL VALVE BODY WELD (DRAWING NO. SO23-507-5-1-199)	2	C-G	C6.20		PT	
03-062-360-01	LPSI PUMP #1 SUPPORT LUG (INTEGRALLY WELDED)	2	C-C	C3.30		PT	
03-065-310	24" SCH 40S ELBOW-TO-PIPE	2	CF1	C5.11	UT	PT	
03-068-950	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-068-1070	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-069-1920	3" VALVE-TO-PIPE	2	CF1	C5.21	UT	PT	
03-069-3640	SWAY STRUT W/INTEGRALLY WELDED ATTACHMENT	2	C-C	C3.20		PT	
03-069-3520	INTEGRALLY WELDED ANCHOR STRAP	2	C-C	C3.20		PT	
03-069-2910	3" SCH 160 PIPE-TO-VALVE	2	CF1	C5.21	UT	PT	
03-069-2570	3" SCH 160 PIPE-TO-VALVE	2	CF1	C5.21	UT	PT	
03-069-1010	3" SCH 160 PIPE TO 3" CHECK VALVE	2	CF1	C5.21	UT	PT	

LIST OF EXAMINATIONS AND TESTS COMPLETED DUING U3C16

03-070-2860	SPRING W/INTEGRALLY WELDED DUMMY STUB	2	C-C	C3.20		PT	
03-070-2890	3-WAY STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-070-2710	SNUBBERS W/INTEGRALLY WELDED DUMMY STUB	2	C-C	C3.20		PT	
03-070-2660	AXIAL STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-070-2680	3-WAY STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-071-1500	GUIDE & Y-STOP W/INTEGRALLY WELDED LUGS	2	C-C	C3.20		PT	
03-075-480	FLANGE-TO-PRIMARY WATERBOX	2	C-A	C1.10	UT		
03-075-490	TUBESHEET-TO-PRIMARY WATERBOX	2	C-A	C1.30	UT		
03-075-540	REINFORCING RING TO NOZZLE WELD	2	C-B	C2.31		PT	
03-075-550	REINFORCING RING TO SHELL WELD	2	C-B	C2.31		MT	
03-080-010	TUBESHEET-TO-SHELL WELD	2	C-A	C1.30	UT		
03-080-020	TUBESHEET-TO-SHELL WELD	2	C-A	C1.30	UT		
03-080-030	HEAD CIRCUMFERENTIAL WELD	2	C-A	C1.20	UT		
03-080-040	HEAD CIRCUMFERENTIAL WELD	2	C-A	C1.20	UT		
SYSTEM LEAKAGE TEST COMPLETED							
PROCEDURE	SYSTEM	CODE CLASS	CODE CATEGORY	CODE ITEM NO.'S	TEST		
SO23-XVII-3.1.1	REACTOR COOLANT	1	B-P	B15.10 THRU B15.70	VT-2		
SO23-XVII-3.2.1	CHEMICAL AND VOLUME CONTROL	2	C-H	C7.10 THRU C7.70	VT-2		
SO23-XVII-3.2.4	SAFETY INJECTION	2	C-H	C7.10 THRU C7.70	VT-2		
SO23-XVII-3.2.5	CONTAINMENT SPRAY	2	C-H	C7.10 THRU C7.70	VT-2		
CODE CASES APPLICABLE TO 3RD TEN YEAR ISI INTERVAL, 1) N-460, 2) N-481, 3) N-498-1, 4) N-504-2, 5) N-598, 6) N-638-1							

6 ATTACHMENT- 3

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

Abstract of Records of Repairs and Replacements

	WO	EQID	Class	NIS-2 Date	Work Summary
1	07051478000/001	S31305ML189	III-2	12/17/2009	Pre-fabricated 20" and 6" feedwater piping
2	07051497000/001	S31305ML190	III-2	12/17/2009	Pre-fabricated 20" and 6" feedwater piping
3	800054423	3HV9362	III-2	4/7/2011	Overhaul valve
4	800083442	S31208ML003	III-2	2/25/2010	Install piping modification in CVCS system
5	800083443	S31208ML003	III-2	2/25/2011	Fabricate piping subassembly
6	800160451	S31201MP003	III-1	2/28/2011	Replace RCP seal
7	800167713	S31204MU018	III-1	3/15/2011	Replace 3" check valve
8	800194369	S31305MU448	III-2	4/1/2011	Replaced poppet in check valve
9	800201448	S31204MP016	III-2	4/26/2011	Replace flange bolting
10	800214037	3HV7258	III-2	2/25/2011	Overhaul valve
11	800245079	3PSV0201	III-1	2/28/2011	Replaced pressurizer safety valve
12	800250844	S31201ME087	III-1	4/8/2011	Replaced pressurizer manway bolting
13	800256222	S3RC015H902	III-1NF	2/4/2011	Fabricate pipe support
14	800262389	3PSV9349	III-2	4/1/2011	Replace safety valve
15	800287303	3HV8419	III-2	4/8/2011	Overhaul atmos.dump valve
16	800309155	3PSV0200	III-1	2/28/2011	Replaced pressurizer safety valve
17	800313900	S31204MU019	III-1	3/15/2011	Replaced 3" check valve
18	800313901	S31204MU020	III-1	3/15/2011	Replaced 3" check valve
19	800313902	S31204MU021	III-1	3/15/2011	Replaced 3" check valve
20	800313903	S31204MU072	III-1	3/29/2011	Replaced 8" check valve
21	800313904	S31204MU073	III-1	3/29/2011	Replaced 8" check valve
22	800313905	S31204MU074	III-1	3/30/2011	Replaced 8" check valve
23	800313906	S31204MU075	III-1	3/29/2011	Replaced 8" check valve
24	800363025	S31204ML329	III-2	4/28/2011	Replace flange bolting
25	800369324	3PSV8403	III-2	2/28/2011	Replaced valve and inlet bolting
26	800369331	3PSV8415	III-2	2/28/2011	Replaced valve and inlet bolting
27	800369335	3PSV8406	III-2	4/15/2011	Replaced valve and inlet bolting
28	800369336	3PSV8410	III-2	4/15/2011	Replaced valve and inlet bolting
29	800369809	3PSV8411	III-2	4/4/2011	Replaced valve and inlet bolting
30	800369811	3PSV8414	III-2	4/4/2011	Replaced valve and inlet bolting
31	800428332	S3SI001H030	III-2NF	1/11/2010	Remove pipe lug for inspection
32	800428910	S3SI001H030	III-2NF	1/11/2010	Reinstalled modified pipe lug
33	800430626	S3SI001H030	III-2NF	1/11/2010	Machined pipe lug to reduce size per ECP
34	800453586	S31220MX034	III-2	4/8/2011	Replaced bolting on Pen 34
35	800457805	S31201MP004	III-1	2/25/2011	Replace RCP seal
36	800460432	S31201ME088	III-1	11/12/2010	Machined primary nozzles
37	800460433	S31301ME089	III-1	11/18/2010	Machined primary nozzles
38	800460434	S31301ME088	III-1	11/10/2010	Machined secondary nozzles
39	800460435	S31301ME089	III-1	11/8/2010	Machined secondary nozzles
40	800460439	S31301ML001	III-2	1/1/2011	Removed / reinstalled main steam piping to E088
41	800460481	S31301ML002	III-2	1/1/2011	Removed / reinstalled main steam piping to E089
42	800460486	S31301ML001	III-2NF	1/5/2011	Removed / reinstalled main steam pipe supports
43	800460487	S31301ML002	III-2NF	12/21/2010	Removed / reinstalled main steam pipe supports
44	800460489	S31305ML190	III-2	1/9/2011	Installed new main and aux. Feedwater piping to E089
45	800460490	S31305ML189	III-2	12/29/2010	Installed new main and aux. Feedwater piping to E088
46	800460492	S31305ML189	III-2NF	1/9/2011	Remove/re-install main and aux. feedwater pipe supports
47	800460492	S31301ME088	III-1	12/20/2010	Repair arc strike on feedwater nozzle
48	800460493	S31305ML190	III-2NF	1/9/2011	Remove/re-install main and aux. feedwater pipe supports
49	800460494	S31301ML1473	III-2	12/11/2010	Installed new valve assembly S31301MU1495
50	800460495	S31301ML1476	III-2	12/12/2010	Installed new valve assembly S31301MU1498
51	800461227	S31301ME088/089	III-1	1/11/2011	Drill and tap holes for loose part monitor sensors
52	800461229	S31301ME088	III-1NF	1/18/2011	Replaced bolting on lower sliding base support
53	800461231	S31301ME089	III-1NF	1/18/2011	Replaced bolting on lower sliding base support
54	800461232	S31301ME088	III-1	1/11/2011	Machined holes in snubber support lugs on E088

55	800461233	S31301ME089	III-1	1/11/2011	Machined holes in snubber support lugs on E089
56	800461243	S31301ME088	III-1	1/1/2011	Replaced steam generator E088
57	800461245	S31301ME089	III-1	12/31/2010	Replaced steam generator E089
58	800461250	S31301ML015	III-2	1/13/2011	Replaced blowdown piping from E088
59	800461251	S31301ML016	III-2	1/3/2011	Replaced blowdown piping from E089
60	800461252	S31301ML015	III-2NF	1/10/2011	Replaced blowdown piping supports from E088
61	800461253	S31301ML016	III-2NF	1/5/2011	Replaced blowdown piping supports from E089
62	800468246	S32101CS001	N/A	1/18/2011	Replaced containment tendon hardware
63	800468480	S32101CS001	N/A	1/18/2011	Replaced containment tendon hardware
64	800468483	S32101CS001	N/A	1/20/2011	Replaced containment tendon hardware
65	800468484	S32101CS001	N/A	1/20/2011	Replaced containment tendon hardware
66	800476247	S32101CS001	N/A	1/1/2011	Replace rebar in containment opening
67	800476248	S32101CS001	III-NE	12/17/2010	Remove/reinstall containment liner plate
68	800476249	S32101CS001	N/A	2/1/2011	Replacement of concrete in containment opening
69	800476250	S32101CS001	N/A	2/1/2011	Replacement of concrete in containment opening
70	800494646	MSSV Inlet Flange Studs	III-2	10/18/2010	Fabricate 75 Inlet Studs for Main Steam Safety valves
71	800507683	S31204MU018	III-1	3/15/2011	VT-1 of new valve hinge pin cover bolting
72	800507685	S31204MU019	III-1	3/15/2011	VT-1 of new valve hinge pin cover bolting
73	800507687	S31204MU020	III-1	3/15/2011	VT-1 of new valve hinge pin cover bolting
74	800507689	S31204MU021	III-1	3/15/2011	VT-1 of new valve hinge pin cover bolting
75	800507691	S31204MU072	III-1	3/29/2011	VT-1 and VT-3 examinations of new valve
76	800507695	S31204MU073	III-1	3/29/2011	VT-1 and VT-3 examinations of new valve
77	800507699	S31204MU074	III-1	3/30/2011	VT-1 and VT-3 examinations of new valve
78	800507763	S31204MU075	III-1	3/29/2011	VT-1 and VT-3 examinations of new valve
79	800511055	S32101CS001	N/A	2/1/2011	Replacement of concrete in containment opening
80	800516738	S31204ML080	III-2	5/4/2011	Install new 6" sch.40s mini-flow piping
81	800516739	S31204ML080	III-2	5/5/2011	Install new 6" sch.40s mini-flow piping
82	800516800	S31204ML080	III-2	5/5/2011	Install new 6" sch.40s mini-flow piping
83	800517039	S31219ML057	III-2	5/3/2011	Install new 6" sch.40s piping
84	800550894	S31204ML080	III-2	5/5/2011	Pre-fabricated 6" ECCS mini-flow piping
85	800550895	S31204ML131	III-2	5/6/2011	Pre-fabricated 4" ECCS mini-flow piping
86	800550896	S31204ML151	III-2	5/6/2011	Pre-fabricated 4" ECCS mini-flow piping
87	800550897	S31219ML107	III-2	5/5/2011	Pre-fabricated 10" piping from RWST
88	800553023	S31219ML107	III-2	5/5/2011	Install new 10" Sch.40s piping from RWST
89	800555453	S3RC015H902	III-1NF	2/4/2011	Replace pipe support
90	800567815	S31219ML057	III-2	5/3/2011	Pre-fabricated 6" piping
91	800571506	S31204ML080	III-2NF	5/5/2011	Pre-fabricate supports for ECCS mini-flow piping
92	800579805	S31204ML080	III-2NF	5/6/2011	Install pipe supports in Room 017
93	800579807	S31204ML080	III-2NF	5/5/2011	Install pipe supports in aux. feedwater pump room
94	800579808	S31219ML107	III-2NF	5/5/2011	Install pipe supports for 10" piping
95	800583669	S31204ML001	III-2	5/2/2011	Pre-fab. 24" ECCS piping
96	800591784	S31208MU070	III-2	4/25/2011	Overhaul globe valve
97	800592040	S31204MU068	III-2	1/18/2011	Replace 2" globe valve
98	800601025	S32101CS001	III-NE	12/17/2010	Remove/reinstall containment liner plate
99	800602362	3HV9371	III-1	2/25/2011	Overhaul Control Valve
100	800608655	S3ST001H008	III-2NF	1/12/2011	Replace snubber
101	800610409	S3FW189H012	III-2NF	1/12/2011	Replace snubber
102	800611066	S31204ML001	III-2	5/2/2011	Replaced 24" ECCS piping
103	800611067	S31219ML057	III-2	5/4/2011	Replaced 6" ECCS piping
104	800611068	S31204ML080	III-2	5/5/2011	Replaced 6" ECCS mini-flow piping
105	800611069	S31204ML080	III-2NF	5/4/2011	Install integral attachments on 6" ECCS mini-flow piping
106	800612785	S3FW190H011T	III-2NF	1/18/2011	Replace load pin
107	800612787	S3FW190H014B	III-2NF	1/18/2011	Replace load pin
108	800612788	S3FW190H015	III-2NF	1/18/2011	Replace load pin

Abstract of Records of Repairs and Replacements

109	800612789	S3FW190H018N	III-2NF	1/18/2011	Replace load pin
110	800612790	S3FW190H018S	III-2NF	1/18/2011	Replace load pin
111	800613420	S3ST002H001	III-2NF	1/12/2011	Replace damaged load pin
112	800613538	S31204ML001	III-2NF	5/2/2011	Install integral attachments on 24" ECCS piping
113	800613539	S31219ML057	III-2NF	5/4/2011	Install integral attachments on 6" ECCS piping
114	800615888	3PSV9308	III-2	4/26/2011	Install new safety relief valve
115	800631801	S31208MU122	III-1	1/19/2011	Overhaul valve
116	800641603	S3FW190H017	III-2NF	1/24/2011	Re-set pipe support cold settings
117	800461242	S31301ME088	III-1	1/1/2011	Replaced Steam Generator E088
118	800486288	S31208MU122	III-1	1/19/2011	Overhaul Valve

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Feedwater System (1305), P&ID 40141ASO3

Date: 11/17/2009 **Sheet 1 of 2**

Unit: 3

Repair/Replacement Plan: 060401390-03

WO: 07051478 000, 07051478 001

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda; NDE methodology and acceptance per 1995 Edition, 1996 Addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
20" and 18" Main Feedwater Piping	Pullman Power Prod. and Bechtel	N5 serial no. S3-1305-8	N/A	S3-1305-ML-189	1978	see block 7	Yes
6" Auxiliary Feedwater Piping	Pullman Power Prod. and Bechtel	N5 serial no. S3-1305-6	N/A	S3-1305-ML-222	1978	see block 7	Yes

7. **Description of Work:**

A portion of the main and auxiliary feedwater piping and the associated integrally attached pipe support parts were pre-fabricated for subsequent installation in the R3C16 refueling outage. The specific boundary of the main feedwater line in this scope includes piping from the downstream side of check valve S31305MU129 to the feedwater nozzle connection of steam generator S31301ME088. The specific boundary of the auxiliary feedwater line in this scope includes piping from the 6" branch connection off of the 18" main feedwater line to the second elbow in reverse flow direction. The new materials and the associated weld documents used for this scope are itemized on the supplemental sheet (attached). The construction code NDE was completed on all of the associated piping subassemblies. The ASME XI Preservice Examinations, pressure test and VT-2 Examinations were not included in this work scope and will be performed as part of the installation work scope.

Reference: NECP 800139902

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

Pressure: N/A psi **Test Temp:** N/A °F

Pressure testing to be performed as part of installation work scope in the R3C16 outage.

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [illegible] for Al Meichler Supervising ASME Code Engineer Date: 2/8/2010
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 1/29/10 to 1/29/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions CA 2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 3/12/10

Table 1. Replacement Materials

Drawing No.	Description	RSO No.	Heat No.	Comments
S3-1305-ML-189.Sh 2, ECN A52649	BOM, item #30. 20" NPS sch 100 pipe. SA-106 Gr C	0516-07	N48106	note 3
	BOM item #16, 18" NPS, sch 100, BW 90° Elbow. SA-234 Gr WPC	0231-07	NOOK	
	BOM item #26, 6" NPS, sch 120, pipe, SA-333 Gr 6	1517-07	U90117	note 4
	BOM item #27, 18"X 6" NPS, WFI Vesselet, SA-350 Gr LF2	0215-07	3859AN F1	
	BOM item #21, 20" NPS X 18" NPS, sch 100 Concentric BW Reducer, SA-234 Gr WPC	0231-07	NODC	
	BOM item #25, 18" NPS, sch 100, BW 30° Elbow, SA-234 Gr WPC	0231-07	NOJS	note 1
	BOM item #28, 6" NPS, sch 120, BW 90° Elbow, SA-420 Gr WPL6	0516-07	NPMP	
	BOM, items #17,22,23, & 24. 18" NPS sch 100 pipe, SA-106 Gr C	1337-07	60839	note 3
	BOM item #10, 18" NPS, sch 100, BW 45° Elbow, SA-234 Gr WPC	0231-07	NOJS	note 7 .
S3-1305-ML-222, Sh 1, ECN D0001526	BOM item #25. 6" NPS X 3/4" NPS WFI SW Pipet. 6000#, pipe. SA-333 Gr 6	1660-07	3117AN B1	
	BOM item #24. 6" NPS, sch 120, pipe. SA-333 Gr 6	1517-07	U90117	note 4
S3-FW-189-H-010. ECN D0009049	BOM item #30A (2 each), 12" NPS sch 80. dummy stubs, SA-106 Gr C; *Pipe support integral attachment*	0516-07	B26965	WR3-07-259 notes 2 & 3
S3-FW-189-H-012. ECN D0009051	BOM item #30A (1 each), 12" NPS sch 80, dummy stub, SA-106 Gr C: *Pipe support integral attachment*	0516-07	B26965	WR3-07-261 notes 2 & 3
S3-FW-189-H-013. ECN D0000730	BOM item #30A (1 each). 10" NPS sch 80. dummy stub. SA-106 Gr C: *Pipe support integral attachment*	0516-07	L62641	WR3-07-263 notes 2 & 3

Table 2. Pipe Welding Documentation

Fab. Weld ID	Weld Document	Comment	Fab. Weld ID	Weld Document	Comment
BU. note 5	not performed	20" BW	BM. note 5	not performed	18" BW
BT. note 5	WR3-07-195(B)	20" BW	BL. note 5	WR3-07-252(J)	18" BW. note 7
BS. note 5	WR3-07-196(C)	18" BW	BK. note 5	not performed	18" BW. note 6
BR. note 5	WR3-07-197(D)	18" BW	BW. note 5	not performed	6" BW. note 6
BQ. note 5	not performed	18" BW	BX. note 5	WR3-07-257(N)	6" BW
BP. note 5	WR3-07-199(F)	18" BW. note 6	BY. note 5	WR3-07-256(M)	6" BW
BV. note 5	WR3-07-254(BR)	6" branch	P. note 8	WR3-07-321(B1)	3/4" branch
BN. note 5	WR3-07-200(G)	18" BW	Q. note 8	not performed	6" BW

Notes:

1. The 30° elbow was fabricated from 45° elbow
2. Welding and NDE documented on referenced Weld Record
3. Report of Reconciliation RoR 001-07 applies
4. Report of Reconciliation RoR 019-03 applies
5. See piping ISO S3-1305-ML-189. sh 2 (ECN A52649) for weld location
6. PSE was not performed as part of this scope
7. Weld to be cut out/existing elbow replaced during installation due to design change after fabrication (special elbow is required)
8. See piping ISO S3-1305-ML-222. sh 1 (ECN D0001526) for weld location

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Feedwater System (1305), P&ID 40141ASO3

Date: 11/17/2009 **Sheet 1 of 2**

Unit: 3

Repair/Replacement Plan: 060401390-04

WO: 07051497 000, 07051497 001

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda; NDE methodology and acceptance per 1995 Edition, 1996 Addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
20" and 18" Main Feedwater Piping	Pullman Power Prod. and Bechtel	N5 serial no. S3-1305-7	N/A	S3-1305-ML-190	1978	see block 7	Yes
6" Auxiliary Feedwater Piping	Pullman Power Prod. and Bechtel	N5 serial no. S3-1305-5	N/A	S3-1305-ML-223	1977	see block 7	Yes

7. **Description of Work:**

A portion of the main and auxiliary feedwater piping and the associated integrally attached pipe support parts were pre-fabricated for subsequent installation in the R3C16 refueling outage. The specific boundary of the main feedwater line in this scope includes piping from the downstream side of check valve S31305MU036 to the feedwater nozzle connection of steam generator S31301ME089. The specific boundary of the auxiliary feedwater line in this scope includes piping from the 6" branch connection off of the 18" main feedwater line to the second elbow in reverse flow direction. The new materials and the associated weld documents used for this scope are itemized on the supplemental sheet (attached). The construction code NDE was completed on all of the associated piping subassemblies. The ASME XI Preservice Examinations, pressure test and VT-2 Examinations were not included in this work scope and will be performed as part of the installation work scope.

Reference: NECP 800139902

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

Pressure: N/A **psi** **Test Temp:** N/A **°F**

Pressure testing to be performed as part of installation work scope in the R3C16 outage.

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 2/8/2010
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 2/12/09 to 1/29/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions CA2093 California
(National Board, State, Province, and Endorsements)

Date 3/12/10

Table 1, Replacement Materials

Drawing No.	Description	RSO No.	Heat No.	Comments
S3-1305-ML-190, Sh 2, ECN A52650	BOM, item #32, 20" NPS sch 100 pipe, SA-106 Gr C	0516-07	N48106	note 3
	BOM item #31, 26, 25, & 22, 18" NPS, sch 100 pipe, SA-106 Gr C	1337-07	60839	note 3
	BOM item #27, 18" NPS, sch 100, BW 30° Elbow, SA-234 Gr WPC	0231-07	NOJU	note 1
	BOM item #24, 20" NPS X 18" NPS, sch 100 Concentric BW Reducer, SA-234 Gr WPC	0231-07	NODC	
	BOM item #30, 6" NPS, sch 120, BW 90° Elbow, SA-420 Gr WPL6	0516-07	NPMP	
	BOM item #29, 18" X 6" NPS, WFI Vesselet, SA-350 Gr LF2	0215-07	3859ANF 1	
	BOM item #28, 6" NPS, sch 120, pipe, SA-333 Gr 6	0686-07	U90117	note 4
	BOM item #21, 18" NPS, sch 100, BW 90° Elbow, SA-234 Gr WPC	0231-07	NOOK	
	BOM, items #11, 18" NPS, sch 100, BW 45° Elbow, SA-234 Gr WPC	0231-07	NOJS	note 7
S3-1305-ML-223, Sh 4, ECN D0001514	BOM item #28, 6" NPS, sch 120, pipe, SA-333 Gr 6	0686-07	U90117	note 4
	BOM item #29, 6" NPS X 3/4" NPS WFI SW Pipet, 6000#, SA-105	1660-07	3117ANB 1	
S3-FW-190-H-011, ECN D0009054	BOM item # 30A (2 each), 12" NPS sch 80, dummy stubs, SA-106 Gr C; *Pipe support integral attachment*	0516-07	B26965	WR3-07-280 notes 2 & 3
S3-FW-190-H-013, ECN D0009057	BOM item # 30A (1 each), 12" NPS sch 80, dummy stub, SA-106 Gr C; *Pipe support integral attachment*	0516-07	B26965	WR3-07-282 notes 2 & 3
S3-FW-190-H-014, ECN D0000736	BOM item # 30A (1 each), 10" NPS sch 80, dummy stub, SA-106 Gr C; *Pipe support integral attachment*	0516-07	L62641	WR3-07-284 notes 2 & 3

Table 2, Pipe Welding Documentation

Fab. Weld ID	Weld Document	Comment	Fab. Weld ID	Weld Document	Comment
NK, note 5	not performed	20" BW	NC, note 5	not performed	18" BW
NJ, note 5	WR3-07-266(B)	20" BW	NB, note 5	WR3-07-273(J)	18" BW, note 7
NH, note 5	WR3-07-267(C)	18" BW	NA, note 5	not performed	18" BW, note 6
NG, note 5	WR3-07-268(D)	18" BW	NL, note 5	not performed	6" BW
NF, note 5	not performed	18" BW	NM, note 5	WR3-07-278(N)	6" BW
NE, note 5	WR3-07-270(F)	18" BW, note 6	NN, note 5	WR3-07-277(M)	6" BW
NP, note 5	WR3-07-275(BR)	6"branch, note 6	DX, note 8	WR3-07-322(B1)	3/4" branch
ND, note 5	WR3-07-271(G)	18" BW	DW, note 8	not performed	6" BW

Notes:

1. The 30° elbow was fabricated from 45° elbow
2. Welding and NDE documented on referenced Weld Record
3. Report of Reconciliation RoR 001-07 applies
4. Report of Reconciliation RoR 019-03 applies
5. See piping ISO S3-1305-ML-190, Sh 2 (ECN A52650) for weld location
6. PSE was not performed as part of this scope
7. Weld to be cut out/existing elbow replaced during installation due to design change after fabrication (special elbow is required)
8. See piping ISO S3-1305-ML-223, Sh 4 (ECN D0001514) for weld location

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Safety Injection System

Date: 04/06/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800054423-0010

WO: 800054423

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Control Valve	Haml-Dahl	74/5797/012	N/A	3HV9362	1977	Corrected	Yes
Valve Plug	Flowserve Corp.	S/N: 2 Heat # 724317	N/A	RSO-2205-02 SA479-316	2002	Installed	Yes

7. **Description of Work:** The valve plug in control valve 3HV9362 was replaced in-kind during overhaul of valve to correct seat leakage. A System Leakage Test and VT-2 examination was performed when returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

   Pressure: 1457 **psi** **Test Temp:** N/A **°F**

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

9. **Remarks:** None.

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/6/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/28/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 2/25/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 070500869-33

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

WO: 800083442, 800083443

4. **Identification of System:** Chemical & Volume Control System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda, NDE methods and acceptance per 1995 Edition, 1996 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" Sch.160 pipe spool	Bechtel Corp.	S3-VC-003-2A	N/A	S3-1208-ML-003	1979	Modified	No
3" Sch.160 Pipe, 7" long	Consolidated Power Supply	Heat # 585930	N/A	ILN#010000000065 SA376 TP316	N/A	Installed	No
(2) 3 x 2" Sch.160 Concentric Reducer	Energy & Process Supply	Heat # EZF1	N/A	RSO-1566-08 SA403 WP316	N/A	Installed	No

7. **Description of Work:** A new temperature switch 3TSH9205 was installed in line S3-1208-ML-003 in accordance with NECP 800074725. The piping components were pre-fabricated in accordance work order 800083443 and weld records WR3-08-032 and WR3-08-033. The pre-fabricated assembly was installed in accordance with work order 800083442 and weld records WR3-08-030 and WR3-08-031. RT examinations were performed on all welds in accordance with the weld records.

A System Leakage Test and VT-2 examination was performed piping system returned to service.

8. **Tests Conducted:** Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___

Pressure: 2253 psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** The 3" pipe is certified to the 1998 Edition, 2000 add. as allowed per reconciliation RoR-014-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 2/28/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 4/17/09 to 2/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402 1, CA2093 California
(National Board, State, Province, and Endorsements)

Date 3/1/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Reactor Coolant System

Date: 2/25/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-206

WO: 800160451

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, W.'71 addenda (Pump)
   ASME Section III, Class 1, 1980 Edition, S. '82 Edition (Mech. Seal)

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0561	N/A	S31201MP003	1978	-------	Yes
RCP Mechanical. Seal	Bingham Willamette	1659057-2	1173	SO23-Cart#23	1986	Removed	Yes
RCP Mechanical. Seal	Bingham Willamette	1659057-11	1219	SO23-Cart#25 Rebuild WO 800121630	1988	Installed	Yes

7. **Description of Work:** The RCP seal cartridge for S31201MP003 was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program under NMO 800121630. The removed seal cartridge was placed into the SONGS rebuild program under NMO 800605414.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___**

VT-2 Exam. performed per procedure SO23-XVII-3.1.1 Pressure: 2250 psi Test Temp: >280 °F

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 4/28/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 7/19/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/28/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/15/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 008-10 Rev.0

WO: 800167713, 800507683

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 1500# Check Valve	Flowserve Corp.	BD-671	N/A	S31204MU018	2007	Removed	Yes
3" 1500# Check Valve	Flowserve Corp.	BH-318	N/A	ILN# 10000009379	2009	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU018 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-353. The welding and NDE were performed per WSI Weld Data Sheets for welds MD and BS.
The following preservice examinations were performed prior to placing valve into service;
1) A VT-1 examination was performed on the hinge pin cover bolting and documented on NDE Report 3VT-001-10.
2) A PDI-UT examination was performed on the Class 1 weld (MD) and documented on NDE Report 310-16UT-031.
3) PDI-UT and PT examinations were performed on the Class 2 weld (BS) and documented on NDE Reports 310-16UT-032 and 310-16PT-013.

R/R NDE Reports: 20365-PT-024, 203625-PT-025, 3RT-311-10, and 3RT-312-10.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below °F

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 1419 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/9/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/25/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-01 Rev. C CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 3 (in.) Outlet size 3 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BH318	N/A	08339-AA553	96568-5	96700-5
BH319	N/A	0918-AA554	96568-6	96700-6
BH320	N/A	0918-AA555	96568-7	96700-7
BH321	N/A	0918-AA556	96568-8	96700-8

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

ILN-10000009379

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BH318-BH321

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5400 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 866; Nut, SA194-8M, HT. CODE CJ7 & AIV
Gasket retainer, SA240-316, HT. CODE 32770-5, 6, 7 & 8; Hinge pin cover, SA479-316, HT CODE 32043-4-
.10 , 11, 12, & 13.

SO 50924, ITEM 1, SIZE 3, FIGURE 1500 SC VALVE

CERTIFICATION OF DESIGN

Design Specification certified by Long Kim Pham P.E. State CA Reg. no. M23153
Design Report certified by R. A. Sizemore P.E. State NC Reg. no. 029425

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 6/19/09 Name Flowserve Corporation (N Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 6/19/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6/19/09 Signed (Authorized Nuclear Inspector) Commissions NC1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ILN-10000009379

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/01/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: ASME Section XI Data -0085

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

WO: 800194369

4. **Identification of System:** Auxiliary Feedwater System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" 900# Y-Globe Lift Check Valve	Atwood & Morrill Co.	4-16188-01	N/A	S31305MU448	1991	Corrected	Yes
Poppet	Weir Valves and Controls	Serial # 2 Ht# E48493	N/A	ILN-10000008114 SA516 gr.70	2009	Installed	Yes

7. **Description of Work:** Check valve S31305MU448 was overhauled to install a new in-kind replacement poppet. A system leakage test and VT-2 examination was performed when valve returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 4/1/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/25/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 800201448-0010, GEN-239 Rev.1

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

WO: 800201448

4. **Identification of System:** Safety Injection System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Spool 3-SI-033-2 & 3	SCE	N/A	N/A	S31204ML033	N/A	Corrected	No
1⅛"-8UN x 8" Stud Bolt (20)	Nova Machine Products	Heat # 3005167 Trace Cd.: 4D10	N/A	ILN-10000022979, SA193 gr.B7	N/A	Installed	No
1⅛"-8UN Heavy Hex Nut (28)	Mackson Inc.	Heat # M82391 Heat Code: ASH	N/A	RSO-2153-06 SA194 gr.7	N/A	Installed	No
1⅛"-8UN Heavy Hex Nut (12)	Mackson Inc.	Heat # M82391 Heat Code: ASH	N/A	RSO-2138-06 SA194 gr.7	N/A	Installed	No

7. **Description of Work:** The 14" flanged spool on the suction side of 3P016 was disassembled / reassembled to correct gasket leak. The flange bolting was replaced in conjunction with the maintenance activity. The (20) stud bolts were fabricated from (5) lengths of 36" all-thread rod in accordance with the requirements of RRP GEN-239 Rev.1.

A system leakage test and VT-2 examination of the flanged connection was performed when placed in service.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: 300.4 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The stud bolts and heavy hex nuts were certified to the 1989 Edition, no addenda as allowed per reconciliations RoR-002-03 and RoR-012-03 respectively.

(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: For, Al Meichler Supervising ASME Code Engineer Date: 4/28/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 1/21/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Safety Injection System

Date: 2/25/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800214037-0010

WO: 800214037

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1975 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 150# Gate Valve	WKM	495442	N/A	3HV7258	1979	Corrected	Yes
Gate	WKM	Heat # 61123A-58	N/A	Refurbishment MO 99050841	1979	Installed	Yes
Segment	WKM	Heat # 61123A-76	N/A	Refurbishment MO 99050841	1979	Installed	Yes

7. **Description of Work:** The gate and segment in WKM gate valve 3HV7258 was replaced with a refurbished spare gate and segment during overhaul of valve to correct seat leakage.

A System Leakage Test and VT-2 examination was performed in conjunction with the LLRT, Appendix J Test.

Note: The refurbished gate and segment were removed from valve 3HV9348 (S/N: 495440) under MO 98062549.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: 55 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 2/25/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/29/10 to 1/16/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/27/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Reactor Coolant System

Date: 02/23/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-215

WO: 800245079

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1974 Edition, no addenda - Valve
   ASME Section III, Class 1, 1974 Edition, S.'74 addenda -Bolting

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser Flow Control	BS-03209	N/A	3PSV0201	1978	Removed	Yes
6" x 8" Pressurizer Safety Valve	Dresser Flow Control	BS-03210	N/A	ILN-10000028442	1978	Installed	Yes
2"-8UN x 14½" Stud Bolt (7)	Mackson Inc.	Heat # 778128 Trace Code "BVK"	N/A	ILN-10000014204 SA193 Gr.B7	N/A	Installed	No
2"-8UN x 14½" Stud Bolt (1)	Mackson Inc.	Heat # 11736340 Trace Code "BMY"	N/A	RSO-1552-07 SA193 Gr.B7	N/A	Installed	No
2"-8UN Heavy Hex Nut (16)	Mackson Inc.	Heat # 8876873 Trace Code "S298"	N/A	RSO-1060-02 SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

Pressurizer safety valve located in plant position 3PSV0201 was replaced with a refurbished and tested spare valve (S/N BS-03210) as a preventative maintenance action. (8) inlet flange stud bolts and (16) inlet flange heavy hex nuts were replaced in-kind in conjunction with the valve replacement. A VT-1 inspection was performed on all new stud bolts and nuts and documented on NDE Report 3VT-014-10.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:X Exempt:___ Other:___**

Pressure: 2250 psia Test Temp: >280 °F (VT-2 performed per SO23-XVII-3.1.1)

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 2/28/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 7/29/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/22/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Mechanical Penetration

Date: 4/8/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-240

WO: 800250844

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, S. '71 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Pressurizer	CE	70603	21496	S31201ME087	1977	Corrected	Yes
1½" x 14¼" Stud (1)	Energy Steel & Supply	Heat # 96894 Heat Code: DUE5	N/A	RSO-1116-97, SA540 gr.B24 Class 3	N/A	Installed	No
1½" Hex Nut (1)	Westinghouse Electric	Ht # 7421869	N/A	RSO-2503-04, SA193 gr.B7	N/A	Installed	No

7. **Description of Work:** The pressurizer manway was removed and reinstalled to support the R3C16 outage activities. All studs and nuts were VT-1 examined upon removal. The stud in hole location #1 were found to be unacceptable during VT-1 examination. The stud and nut at this location were replaced in-kind. A VT-1 examination was performed on the new replacement stud and nut with satisfactory results and documented on 3VT-010-10. A VT-2 examination and system leakage test was performed on the manway connection during start-up in accordance with procedure SO23-XVII-3.1.1

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:_X_ Exempt:___ Other:__**

Pressure: 2250 psi Test Temp: ≥ 280 °F

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

FORM NIS-2 (back)

9. **Remarks:** The replacement stud was certified to the 1989 Edition, no add. as allowed per reconciliation RoR-025-03

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/8/11

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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/8/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/28/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

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

Date: 2/01/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800555453-0010

WO: 800256222, 800555453

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
40-12 Pipe Clamp	Sanwa Tekki	-------	N/A	S3RC015H902	N/A	Removed	No
40-12 Pipe Clamp	Anvil	-------	N/A	ILN-10000027220 * See Block 7	N/A	Installed	No

7. **Description of Work:** The jet impingement guide in plant location S3RC015H902 was replaced in accordance with NECP 800204591modify support to re-establish design gap. NMO 800256222 and Weld Record WR3-10-120 performed shop fabrication and NMO 800555453 removed the old and installed the new jet impingement guide assembly. A VT-3 examination was performed after installation of pipe clamp assembly.

List of materials included in pipe clamp assembly:

1. 1" Plate, SA36, Heat Code PL-654
2. 3/4" Plate, SA36, Heat Code PL-628
3. 1¼" Round Bar, SA36, Heat Code B-1724
4. 1¼" - 7 Hex Nut, SA563 Gr.A, Heat # 091046170C
5. 1¼" - 7 Jam Nut, SA563 Gr.A, Heat Code BPP

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 2/4/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 1/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/18/11

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

As Required by the Provisions of the ASME Code Section XI

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

   Date: 04/01/2011 **Sheet 1 of 1**

   Unit: 3

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

   Repair/Replacement Plan: ASME SECTION XI DATA-0207, GEN-239

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

   WO: 800262389

4. **Identification of System:** Safety Injection / Shutdown Cooling System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 8" Relief Valve	Crosby Valve & Gage	N60061-00-0004	N/A	3PSV9349	1984	Removed	Yes
6" x 8" Relief Valve	Crosby Valve & Gage	N60061-00-0002	N/A	Refurbished and tested under WO 800197450	1978	Installed	Yes
(1) 1"-8UN x 36" long all-thread	Mackson Inc.	Heat # 806834	N/A	ILN-10000007758 SA193 gr.B7	N/A	Installed	No

7. **Description of Work:**

Replaced the relief valve in plant position 3PSV9349 with a rebuilt and tested spare valve (S/N: N60061-00-0002) as a surveillance work activity. (1) stud was found to have thread damage and was replaced in-kind. The 5½" long replacement stud was cut from all-thread material in accordance with RRP-GEN-239 Rev.1.

The removed valve (S/N: 60061-00-0004) was placed into the SONGS rebuild program to be refurbished under NMO 800672465.

A system leakage test and VT-2 examination was performed when returned to service.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

   Pressure: 300.4 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The replacement stud was certified to the 1989 Edition, no addenda as allowed per reconciliation RoR-002-03.

(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: [signature] for Al Meichler Supervising ASME Code Engineer Date: 4/1/10
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/12/10 to 1/21/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/28/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Safety Injection System

Date: 04/06/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800287303-0010

WO: 800287303

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6"x 12" 900# Drag Valve	B&W/Control Components	18447-3-3	N/A	3HV8419	1979	Corrected	Yes
Valve Plug	Control Components Inc.	S/N: 3 Heat # 242292	N/A	RSO-1627-00 SA182-F11	2000	Installed	Yes
1-3/8"-8UN-2A x 8-5/8" stud bolt (4)	Nova Machine Products	Ht.# 54395 Lot # 326 Ht. Code: ESW	N/A	RSO-0537-97 SA193 gr.B7	N/A	Installed	No
1-3/8"-8UN-2A x 8-5/8" stud bolt (4)	Mackson Inc.	Ht#: 680S086 Ht.Code: AHF	N/A	RSO-0007-07 SA193 gr.B7	N/A	Installed	No
1-3/8" Heavy Hex Nut (14)	Mackson Inc.	Ht.# M82952 Ht. Code: AVM	N/A	ILN-10000007021 SA194 gr.7	N/A	Installed	No

7. **Description of Work:** The valve plug in main steam atmospheric dump valve 3HV8419 was replaced in-kind during overhaul of valve to correct seat leakage. (8) new bonnet stud bolts and (14) new bonnet stud nuts were also installed during reassembly. The stud bolts were fabricated from (2) 36" lengths of all-thread material.

A System Leakage Test and VT-2 examination was performed when returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The replacement bolting was certified to the 1989 Edition, no add. as allowed per RoRs 002-03 & 012-03.

(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: [illegible] For Al Meichler Supervising ASME Code Engineer Date: 4/8/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/29/11

RSO-1627-00

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

As Required by the Provisions of th ASME Code, Section III

Not to Exceed One Day's Production

1. Manufactured and certified by C C I, 22591 Avenida Empresa, Rancho Santa Margarita, CA 92688
(name and address of Certificate Holder)

2. Manufactured for SOUTHERN CALIFORNIA EDISON, SAN ONOFRE, CALIFORNIA
(name and address of purchaser)

3. Location of installation SAN ONOFRE NUCLEAR GENERATING STATION, CALIFORNIA
(name and address)

4. Type

320601245	SA 182 - F11	70,000 PSI	N/A	2000
(drawing no.)	(mat'l spec. no.)	(tensile strength)	(CRN)	(year built)

5. ASME Code, Section III, Division 1:

1974	SUMMER 1974	2	N/A
(edition)	(addenda date)	(class)	(Code Case no.)

6. Fabricated in accordance with Const. Spec. (div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks FOR MAIN STEAM ATMOSPHERIC DUMP VALVES
CCI WORK ORDER 100072, CCI SFO#134111

8. Nom. thickness (in.) 3.0 Min. design thickness 2.669 Dia. ID (ft & In.) N/A Length overall (ft & in.) 12"

9. When applicable, Certificate Holders' Data Reports are attached for each item of the this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1.)	134111 S/N 1	N/A
(2.)	134111 S/N 2	N/A
(3.)	134111 S/N 3	N/A
(4.)		
(5.)		
(6.)		
(7.)		
(8.)		
(9.)		
(10.)		
(11.)		
(12.)		
(13.)		
(14.)		
(15.)		
(16.)		
(17.)		
(18.)		
(19.)		
(20.)		
(21.)		
(22.)		
(23.)		
(24.)		
(25.)		

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

10. Design pressure 1085 psi Temp 560 Deg F Hydro test pressure N/A at temp. Deg. F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 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.

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KSO-1627-00

Form N-2

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

Certificate Holder's Serial No. See Pg. 1 Through _____

CERTIFICATE OF DESIGN

Design Specification certified by DELBERT C. UNRUH P.E. State CA Reg. No. 12634

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

CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-2696 Expires JUNE 7, 2003

Date 24 AUG 00 Name C C I (NPT Certificate Holder) Signed [signature] (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY of HARTFORD, CONNECTICUT have inspected these items described in this Data Report on 8-24-2000, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with ASME Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8-24-00 Signed [signature] (Authorized Inspector) Commissions CA 1494 (Nat'l Bd. (including endorsement) and state or prov., and no.)

wm 9/23/00

BEST AVAILABLE COPY

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Reactor Coolant System

Date: 02/23/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-215

WO: 800309155

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1974 Edition, no addenda - Valve
   ASME Section III, Class 1, 1974 Edition, S.'74 addenda -Bolting

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser Flow Control	BU-06254	N/A	3PSV0200	1980	Removed	Yes
6" x 8" Pressurizer Safety Valve	Dresser Flow Control	BS-03211	N/A	ILN-10000028442	1978	Installed	Yes
2"-8UN x 14½" Stud Bolt (3)	Mackson Inc.	Heat # 11505330 Trace Code "AQJ"	N/A	RSO-0297-03 SA193 Gr.B7	N/A	Installed	No
2"-8UN x 14½" Stud Bolt (5)	Mackson Inc.	Heat # 11736340 Trace Code "BMY"	N/A	RSO-1552-07 SA193 Gr.B7	N/A	Installed	No
2"-8UN Heavy Hex Nut (16)	Mackson Inc.	Heat # 8876873 Trace Code "S298"	N/A	RSO-1060-02 SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

Pressurizer safety valve located in plant position 3PSV0200 was replaced with a refurbished and tested spare valve (S/N BS-03211) as a preventative maintenance action. (8) inlet flange stud bolts and (16) inlet flange heavy hex nuts were replaced in-kind in conjunction with the valve replacement. A VT-1 inspection was performed on all new stud bolts and nuts and documented on NDE Report 3VT-013-10.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:X Exempt:___ Other:___**

Pressure: 2250 psia Test Temp: ≥280 °F (VT-2 performed per SO23-XVII-3.1.1)

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [illegible] for Al Meichler Supervising ASME Code Engineer Date: 2/28/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 7/29/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/22/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/15/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 007-10 Rev.0

WO: 800313900, 800507685

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 1500# Check Valve	Flowserve Corp.	AW405	N/A	S31204MU019	2004	Removed	Yes
3" 1500# Check Valve	Flowserve Corp.	BH-317	N/A	ILN# 10000009362	2009	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU019 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-352. The welding and NDE were performed per WSI Weld Data Sheets for welds U and T.
The following preservice examinations were performed prior to placing valve into service;
1) A VT-1 examination was performed on the hinge pin cover bolting and documented on NDE Report 3VT-004-10.
2) A PDI-UT examination was performed on the Class 1 weld (U) and documented on NDE Report 310-16UT-039.
3) PDI-UT and PT examinations were performed on the Class 2 weld (T) and documented on NDE Reports 310-16UT-039 and 310-16PT-014.

R/R NDE Reports: 20365-PT-039, 203625-PT-040, 3RT-335-10, and 3RT-336-10.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below °F

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 1442 psig.
The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/6/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/25/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-01 Rev. C CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 3 (in.) Outlet size 3 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BH317	N/A	0918-AA560	96568-1	96700-2

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BH317

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5400 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 866; Nut, SA194-8M, HT. CODE CJ7
Gasket retainer, SA240-316, HT. CODE 32770-1 ; Hinge pin cover, SA479-316, HT CODE 32043-4-6

SO 50924, ITEM 8, SIZE 3, FIGURE 1500 SC VALVE

CERTIFICATION OF DESIGN

Design Specification certified by Long Kim Pham P.E. State CA Reg. no. M23153
Design Report certified by R. A. Sizemore P.E. State NC Reg. no. 029425

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 6-30-09 Name Flowserve Corporation (N Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 6/30/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 6/30/09 Signed (Authorized Nuclear Inspector) Commissions NC1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/15/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 005-10 Rev.0

WO: 800313901, 800507687

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 1500# Check Valve	Anchor-Darling	1N-204	N/A	S31204MU020	1976	Removed	Yes
3" 1500# Check Valve	Flowserve Corp.	BH-322	N/A	ILN# 10000026002	2010	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU020 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-354. The welding and NDE were performed per WSI Weld Data Sheets for welds MN and CP.
The following preservice examinations were performed prior to placing valve into service;
1) A VT-1 examination was performed on the hinge pin cover bolting and documented on NDE Report 3VT-002-10.
2) A PDI-UT examination was performed on the Class 1 weld (MN) and documented on NDE Report 310-16UT-040.
3) PDI-UT and PT examinations were performed on the Class 2 weld (CP) and documented on NDE Reports 310-16UT-039 and 310-16PT-014.

R/R NDE Reports: 20365-PT-047, 203625-PT-048, 3RT-337-10, and 3RT-338-10.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below **°F**

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 1400 psig.
The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/6/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/25/11

Revised 9/2/2010

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

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

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-01 Rev. C CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 3 (in.) Outlet size 3 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BH322	N/A	0918-AA557	96568-2	96700-1
BH324	N/A	0918-AA559	96568-4	96700-4

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

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Revised 9/2/2010

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BH322 & BH324

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5400 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 866; Nut, SA194-8M, HT. CODE CJ7
Gasket retainer, SA240-316, HT. CODE 32770-1 thru 4; Hinge pin cover, SA479-316, HT CODE 32043-4-6 thru 9

SEE CERTIFICATE OF REWORK ATTACHED DATED 7/23/2010 REWORK S.O. 78407
ORIGINAL SO 50924, ITEM 2, SIZE 3, FIGURE 1500 SC VALVE

CERTIFICATION OF DESIGN

Design Specification certified by Long Kim Pham P.E. State CA Reg. no. M23153
Design Report certified by R. A. Sizemore P.E. State NC Reg. no. 029425

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-2012

Date 9/2/2010 Name Flowserve Corporation (N Certificate Holder) Signed (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 7/23/10, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/2/10 Signed (Authorized Nuclear Inspector) Commissions NC1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

7

100002 6002

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/15/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 006-10 Rev.0

WO: 800313902, 800507689

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
3" 1500# Check Valve	Anchor-Darling	1N-202	N/A	S31204MU021	1976	Removed	Yes
3" 1500# Check Valve	Flowserve Corp.	BH-324	N/A	ILN# 10000026002	2010	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU021 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-351. The welding and NDE were performed per WSI Weld Data Sheets for welds ML and RP.
The following preservice examinations were performed prior to placing valve into service;
1) A VT-1 examination was performed on the hinge pin cover bolting and documented on NDE Report 3VT-003-10.
2) A PDI-UT examination was performed on the Class 1 weld (ML) and documented on NDE Report 310-16UT-033.
3) PDI-UT and PT examinations were performed on the Class 2 weld (RP) and documented on NDE Reports 310-16UT-032 and 310-16PT-013.

R/R NDE Reports: 20365-PT-014, 203625-PT-015, 3RT-307-10, and 3RT-308-10.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below **°F**

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 1416 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: [illegible] for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/9/11 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/25/11

Revised 9/2/2010

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

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

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603 (name and address of N Certificate Holder)
2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000 (name and address of Purchaser)
3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672 (name and address)
4. Model No., Series No., or Type 1500 SC Drawing 08-50924-01 Rev. C CRN N/A
5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 3 (in.) Outlet size 3 (in.)
7. Material:
   (a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
   (b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BH322	N/A	0918-AA557	96568-2	96700-1
BH324	N/A	0918-AA559	96568-4	96700-4

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

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Revised 9/2/2010

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BH322 & BH324

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5400 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 866; Nut, SA194-8M, HT. CODE CJ7
Gasket retainer, SA240-316, HT. CODE 32770-1 thru 4; Hinge pin cover, SA479-316, HT CODE 32043-4-6 thru 9

SEE CERTIFICATE OF REWORK ATTACHED DATED 7/23/2010 REWORK S.O. 78407
ORIGINAL SO 50924, ITEM 2, SIZE 3, FIGURE 1500 SC VALVE

CERTIFICATION OF DESIGN

Design Specification certified by Long Kim Pham P.E. State CA Reg. no. M23153
Design Report certified by R. A. Sizemore P.E. State NC Reg. no. 029425

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-2012

Date 9/2/2010 Name Flowserve Corporation (N Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 7/23/10, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/2/10 Signed (Authorized Nuclear Inspector) Commissions NU549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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100002 6002

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/29/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 004-10 Rev.0

WO: 800313903, 800507691

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
8" 1500# Check Valve	Flowserve Corp.	AU738	N/A	S31204MU072	2004	Removed	Yes
8" 1500# Check Valve	Flowserve Corp.	BG636	N/A	ILN# 10000009363	2009	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU072 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-358. The welding and NDE were performed per WSI Weld Data Sheets for welds M and AJ. The following pre-service examinations (PSE) were performed prior to returning valve to service; A VT-1 examination of hinge pin cover bolting, a VT-3 on the valve body internal surfaces, a PT and PDI-UT examination of the ASME III-2 weld (M), and a PDI-UT examination of the ASME III-1 weld (AJ).

Reference: Iso. drawings S3-1204-ML-043 sh. 1, with ECN D0019046 and S3-1204-ML-039, sh 1 with ECN D0019058.
R/R NDE Reports:, 203625-PT-018, 203625-PT-019, 3RT-309-10, and 3RT-310-10,
PSE NDE Reports: 3VT-008-09, 3VT-015-10, 310-16PT-012, 310-16UT-028, and 310-16UT-029.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below °F

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 361 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/6/10 to 2/8/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/26/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-03 Rev. G CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 8 (in.) Outlet size 8 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BG636	N/A	GBHO-09X239-5	96676-1	96725-1

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

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ILN-10000009363

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BG636

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5625 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 341; Nut, SA194-8M, HT. CODE 023
Gasket retainer, SA182-316, HT. CODE 96675-1; Hinge pin cover, SA479-316, HT CODE 32047-1-1

SO 50924, ITEM 9, SIZE 8, FIGURE 1500 SC VALVE

CERTIFICATION OF DESIGN

Design Specification certified by LONG KIM PHAM P.E. State CA Reg. no. M23153
Design Report certified by RONALD S. FARRELL P.E. State NC Reg. no. 028656

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 6-30-09 Name Flowserve Corporation (N Certificate Holder) Signed [signature] (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 6/30/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6/30/09 Signed [signature] (Authorized Nuclear Inspector) Commissions NI1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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10000009363 10

ILN-10000009363

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/29/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 003-10 Rev.0

WO: 800313904, 800507695

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
8" 1500# Check Valve	Anchor/Darling	1N-228	N/A	S31204MU073	1976	Removed	Yes
8" 1500# Check Valve	Flowserve Corp.	BG696	N/A	ILN# 10000010963	2009	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU073 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-355. The welding and NDE were performed per WSI Weld Data Sheets for welds M and AJ. The following pre-service examinations (PSE) were performed prior to returning valve to service; A VT-1 examination of hinge pin cover bolting, a VT-3 on the valve body internal surfaces, a PT and PDI-UT examination of the ASME III-2 weld (M), and a PDI-UT examination of the ASME III-1 weld (V).

Reference: Iso. drawings S3-1204-ML-044 sh. 1, with ECN D0019061 and S3-1204-ML-040, sh 1 with ECN D0019076.
R/R NDE Reports:, 203625-PT-049, 203625-PT-050, 3RT-333-10, and 3RT-334-10,
PSE NDE Reports: 3VT-007-09, 3VT-016-10, 310-16PT-015, 310-16UT-035, and 310-16UT-036..

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below **°F**

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 365 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for AL Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/6/10 to 2/8/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/26/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-03 Rev. G CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 8 (in.) Outlet size 8 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
8G696	N/A	GBGD-09X239-1	96676-6	96725-5

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

ILN-10000010963

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BG696

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5625 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 341; Nut, SA194-8M, HT. CODE 023
Gasket retainer, SA182-316, HT. CODE 96675-4; Hinge pin cover, SA479-316, HT CODE 32047-1-7

SO 50924, ITEM 3

CERTIFICATION OF DESIGN

Design Specification certified by LONG KIM PHAM P.E. State CA Reg. no. M23153
Design Report certified by RONALD S. FARRELL P.E. State NC Reg. no. 028656

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 7/23/09 Name Flowserve Corporation (N Certificate Holder) Signed [signature] (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 7/23/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7/23/09 Signed [signature] (Authorized Nuclear Inspector) Commissions NB549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ILN-10000010963

3

ILN-10000010963

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/30/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 002-10 Rev.0

WO: 800313905, 800507699

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
8" 1500# Check Valve	Flowserve Corp.	AU737	N/A	S31204MU074	2004	Removed	Yes
8" 1500# Check Valve	Flowserve Corp.	BG729	N/A	ILN# 10000009363	2009	Installed	Yes
8" NPS sch 140 SMLS Pipe, 12" long	Dubose National Energy	Ht # 29258 Tr.# 35035	N/A	ILN-10000015151 SA-312 Gr TP316	N/A	Installed	No
1" NPS Pipet	WFI/Dubose National Energy	Ht. Cd.: 3901ANA Ht.# 417310	N/A	ILN 10000028514 SA182 gr F316	N/A	Installed	No

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU074 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-357. The welding and NDE were performed per WSI Weld Data Sheets for welds ML, MM, N, SA, and MP. The following pre-service examinations (PSE) were performed prior to returning valve to service; A VT-1 examination of hinge pin cover bolting, a VT-3 on the valve body internal surfaces, a PT and PDI-UT examination of the Class 2 weld (N), and a PDI-UT examination of the Class 1 welds (ML &MM). Note: PSE volumetric examinations were not required for welds SA and MP (1"NPS).
Reference: Iso. drawings S3-1204-ML-045 sh. 1, with ECN D0019042 and S3-1204-ML-041, sh 1 with ECN D0019045.
R/R NDE Reports: 203625-PT-003, 203625-PT-005, 203625-PT-041, 203625-PT-042, 3RT-303-10, 3RT-330-10, 3RT-331-10, and 3RT-332-10.
PSE NDE Reports: 3VT-006-09, 3VT-017-10, 310-16PT-015, 310-16UT-036, and 310-16UT-037.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below **°F**

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 350 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda. The pipet was certified to the 1998 Edition, 2000 add. of NB-2000 as allowed per reconciliation RoR-005-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/6/10 to 2/8/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/26/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-03 Rev. G CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 8 (in.) Outlet size 8 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BG729	N/A	GAXS-09X69-1	96676-3	96725-3

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BG729

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5625 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 341; Nut, SA194-8M, HT. CODE 023
Gasket retainer, SA182-316, HT. CODE 96675-3; Hinge pin cover, SA479-316, HT CODE 32047-1-6

SO 50924, ITEM 3

CERTIFICATION OF DESIGN

Design Specification certified by LONG KIM PHAM P.E. State CA Reg. no. M23153

Design Report certified by RONALD S. FARRELL P.E. State NC Reg. no. 028656

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 6/30/09 Name Flowserve Corporation (N Certificate Holder) Signed [signature] (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 6/30/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 6/30/09 Signed [signature] (Authorized Nuclear Inspector) Commissions NC1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 3/29/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 001-10 Rev.0

WO: 800313906, 800507763

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 Addenda (valve)
   ASME Section III, Class 1, 1974 Edition, Summer 1974 addenda (downstream weld)
   ASME Section III, Class 2, 1974 Edition, Summer 1974 addenda (upstream weld)
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
8" 1500# Check Valve	Anchor/Darling	1N-223	N/A	S31204MU075	1976	Removed	Yes
8" 1500# Check Valve	Flowserve Corp.	BG698	N/A	ILN# 10000009363	2009	Installed	Yes

7. **Description of Work:** The check valve in plant FLOC S3.ECCS. S31204MU075 was replaced with a new style valve that incorporates a resilient seat in accordance with NECP 800129659. Welding Services Inc. (WSI) was contracted to perform the valve replacement in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 203625-TR-001 and 203625-TR-356. The welding and NDE were performed per WSI Weld Data Sheets for welds M and MF. The following pre-service examinations (PSE) were performed prior to returning valve to service; A VT-1 examination of hinge pin cover bolting, a VT-3 on the valve body internal surfaces, a PT and PDI-UT examination of the ASME III-2 weld (M), and a PDI-UT examination of the ASME III-1 weld (MF).

Reference: Iso. drawings S3-1204-ML-046 sh. 1a, with ECN D0019088 and S3-1204-ML-042, sh 1 with ECN D0019092.
R/R NDE Reports:, 203625-PT-032, 203625-PT-033, 3RT-313-10, and 3RT-314-10,
PSE NDE Reports: 3VT-005-09, 3VT-018-10, 310-16PT-012, 310-16UT-029, and 310-16UT-030.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: *See detail below **Test Temp:** *See detail below °F

*A VT-2 System Leakage Pressure Test was conducted on the ASME III Class 2 side of the valve at 359 psig. The ASME III class 1 side was examined during the RCS Pressure Boundary Leak test in accordance with ISI procedure SO23-XVII-3.1.1 with the pressure at ≥ 2250 psig and the temperature ≥ 280° F.

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

FORM NIS-2 (back)

9. **Remarks:** All NDE was performed in accordance with ASME Section III, NB/NC, 1995 edition, 1996 Addenda.

(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: for Al Meichler Supervising ASME Code Engineer Date: 3/30/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/6/10 to 2/8/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/26/11

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Flowserve Corporation, 1900 South Saunders St. Raleigh, NC 27603
(name and address of N Certificate Holder)

2. Manufactured for Edison Material Supply LLC PO Box 700 Rosemead, CA 917700000
(name and address of Purchaser)

3. Location of installation San Onofre Nuclear Generating Station 14300 Mesa Rd. San Clemente, CA 92672
(name and address)

4. Model No., Series No., or Type 1500 SC Drawing 08-50924-03 Rev. G CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) Summer 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 8 (in.) Outlet size 8 (in.)

7. Material:
(a) valve Body SA351 CF8M Bonnet SA182 F316 Disk SA182F316L Bolting SA453 GR660B
(b) pump Casing _____ Cover _____ Bolting _____

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
BG698	N/A	GBGD-09X239-2	96676-5	96725-4

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 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.

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BG698

8. Design conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class 1500

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5625 psi. Disk differential test pressure 3600 psi

11. Remarks: Bolting is as follows: Stud, SA453-660B, HT. CODE 341; Nut, SA194-8M, HT. CODE 023
Gasket retainer, SA182-316, HT. CODE 96675-5; Hinge pin cover, SA479-316, HT CODE 32047-1-4

SO 50924, ITEM 3

CERTIFICATION OF DESIGN

Design Specification certified by LONG KIM PHAM P.E. State CA Reg. no. M23153
Design Report certified by RONALD S. FARRELL P.E. State NC Reg. no. 028656

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N-1562 Expires 11-26-09

Date 6/30/09 Name Flowserve Corporation (N Certificate Holder) Signed Rebecca Hardsgrove (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 6/30/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6/30/09 Signed (Authorized Nuclear Inspector) Commissions NC1549 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/28/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 800363025-0010, GEN-239 Rev.1

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

WO: 800363025

4. **Identification of System:** Safety Injection System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
8" 150# Flanged Joint	SCE	N/A	N/A	S31204ML329	N/A	Corrected	No
3/4"-10UN x 5.25" Stud Bolt (8)	Nova Machine Products	Heat # 3001306	N/A	ILN-10000015951, SA193 gr.B7	N/A	Installed	No
3/4"-10UN Heavy Hex Nut (16)	Mackson Inc.	Heat # S44035	N/A	ILN-10000008138 SA194 gr.2H	N/A	Installed	No

7. **Description of Work:** The 8" flanged spool on the suction side of 3P012 was disassembled / reassembled to correct a boric acid leak. The flange bolting was replaced in conjunction with the maintenance activity. The (8) stud bolts were fabricated from (2) lengths of 36" all-thread rod in accordance with the requirements of RRP GEN-239 Rev.1.

A system leakage test and VT-2 examination of the flanged connection was performed when placed in service.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 20.2 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The stud bolts were certified to the 1971 Edition, no addenda as allowed per reconciliation RoR-002-03. The nuts were certified to the 1989 Edition, no add. as allowed per reconsiliation RoR-003-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/28/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 02/28/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0187

WO: 800369324

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0010	N/A	3PSV8403	1976	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0030	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (12)	Nova Machine Products Inc	Heat # 72814 Heat Code "4S38"	N/A	SA193 Gr.B7 ILN-10000027369	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AVM"	N/A	ILN-10000007021, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

The main steam safety valve located in plant position 3PSV8403 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0030). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work order 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR 002-03 reconciles the replacement studs which are certified to the 1971 Edition, no add. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 3/1/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 02/28/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0190

WO: 800369331

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0015	N/A	3PSV8415	1976	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0024	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (10)	Mackson Inc	Heat # 11503850 Heat Code "AQG"	N/A	SA193 Gr.B7 RSO-0831-08	N/A	Installed	No
1-3/8"-8UN(3A) Inlet Studs (2)	Nova Machine Products Inc.	Heat # 72814 Heat Code "4S38"	N/A	SA193 Gr.B7 ILN-10000027369	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AVM"	N/A	ILN-10000007021, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

The main steam safety valve located in plant position 3PSV8415 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0024). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work orders 800345427 and 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR-002-03 reconciles the replacement studs which were certified to the 1989 Edition, no add. and 1971 Edition, no addenda respectively. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 3/1/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 04/14/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0190

WO: 800369335

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0009	N/A	3PSV8406	1976	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0031	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (12)	Mackson Inc	Heat # 11503850 Heat Code "AQG"	N/A	RSO-0521-05-00 SA193 Gr.B7	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AVM"	N/A	ILN-10000007021, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

The main steam safety valve located in plant position 3PSV8406 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0031). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work order 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR 002-03 reconciles the replacement studs which are certified to the 1989 Edition, no add. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 4/15/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/2/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 04/14/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0185

WO: 800369336

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0017	N/A	3PSV8410	1976	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0034	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (12)	Nova Machine Products Inc	Heat # 72814, Heat Code "4S38"	N/A	ILN# 10000027369 SA193 gr. B7	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AUP"	N/A	RSO-0829-08, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**
The main steam safety valve located in plant position 3PSV8410 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0034). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work order 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___**

Pressure: 1011 psia Test Temp: N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** RoR 002-03 reconciles the replacement studs which are certified to the 1989 Edition, no add. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 4/15/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/2/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 04/04/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0186

WO: 800369809

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0027	N/A	3PSV8411	1977	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0019	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (9)	Nova Machine Products Inc	Heat # 72814 Heat Code "4S38"	N/A	SA193 Gr.B7 ILN-10000027369	N/A	Installed	No
1-3/8"-8UN(3A) Inlet Studs (3)	Mackson Inc	Heat # 11503850 Heat Code "AQG"	N/A	RSO-0521-05-00 SA193 Gr.B7	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AVM"	N/A	ILN-10000007021, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

The main steam safety valve located in plant position 3PSV8411 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0019). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work order 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR 002-03 reconciles the replacement studs which are certified to the 1971 Edition, no add. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 7/4/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/9/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 04/04/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: ASME SECTION XI DATA-0189

WO: 800369811

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0016	N/A	3PSV8414	1976	Removed	Yes
6" x 10" Main Stm. Safety Valve	Crosby Valve & Gage	N58737-01-0021	N/A	ILN # 890000007402	1977	Installed	Yes
1-3/8"-8UN(3A) Inlet Studs (12)	Nova Machine Products Inc	Heat # 72814 Heat Code "4S38"	N/A	SA193 Gr.B7 ILN-10000027369	N/A	Installed	No
1-3/8" Heavy Hex Nuts (12)	Mackson Inc	Ht.# M82952, Heat Code "AVM"	N/A	ILN-10000007021, SA194 Gr.7	N/A	Installed	No

7. **Description of Work:**

The main steam safety valve located in plant position 3PSV8414 was replaced as a scheduled preventative maintenance action with a refurbished spare valve (s/n N58737-01-0021). 12 inlet studs and nuts were replaced in conjunction with the valve replacement. The inlet studs were fabricated under work order 800494646. The removed valve was placed in the rebuild program for refurbishment. A VT-2 examination and system leakage test was performed when valve return to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR 002-03 reconciles the replacement studs which are certified to the 1971 Edition, no add. RoR-012-03 reconciles the replacement nuts which were certified to the 1989 Edition, 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 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: for Al Meichler Supervising ASME Code Engineer Date: 4/4/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 8/5/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

==========

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

Date: 01/11/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 800428332-0012, 800429910-0012, 800430626-0010-0100

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

WO: 800428332, 800429910, 800430626

4. **Identification of System:** Safety Injection System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, summer 1974 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2 x 4 x 8⅞" Lug	Jessop Steel	Heat # 11625	N/A	SA240 Ty-304 S3-SI-001-H-030	N/A	Corrected	No

7. **Description of Work:**

1. The south east lug (item 38) shown on pipe support drawing S3-SI-001-H-030 was removed in accordance with WO 800428332 to permit inspection of pipe wall underneath the lug as part of the requirement imposed by Code Case N-513-2.
2. The lug weld removal areas were dye penetrant examined in accordance with WR3-09-149 and results documented on NDE Report 3PT-019-09.
3. The removed lug was machined per NECP 800430270 and WO 800430626 to reduce the vertical width of the lug from 8⅞" to 4⅛".
4. The modified lug was reinstalled in accordance with NECP 800430270, ECN D0026845, WR3-09-149, and WO 800429910.
5. The completed welds were dye penetrant examined in accordance with WR3-09-149 and the acceptable results documented on NDE Report 3PT-020-09.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:** X **Other:**___

Pressure: N/A **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [illegible] for Al Meichler Supervising ASME Code Engineer Date: 2/22/10
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 12/22/09 to 12/24/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/15/10

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/08/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: ASME XI DATA-0609, GEN-239 Rev.1

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

WO: 800453586

4. **Identification of System:** Mechanical Penetration

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Mechanical Penetration # 34	SCE	N/A	N/A	S31220MX034	N/A	Corrected	No
7/8"-9UN x 5 ½" Stud Bolt (1)	Mackson Inc	Heat # 470650	N/A	ILN-010000010325, SA193 gr.B7	N/A	Installed	No
7/8"-9UN Heavy Hex Nut (3)	Mackson Inc.	Heat # 247049 Heat Code: JSY	N/A	RSO-0788-06 SA194 gr.2H	N/A	Installed	No

7. **Description of Work:** The outside flange on mechanical penetration 3MX34 required replacement of the bolting materials when reassembled at completion of the R3C16 outage. (1) stud bolt and (3) nuts were replaced inkind. The replacement stud bolt was fabricated from a length of 36" all-thread material in accordance with the requirements of RRP GEN-239 Rev.1.
An LLRT of the penetration was performed in accordance with procedure SO23-3-3.51.1 when reassembled.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The all-thread material was certified to the 1989 Edition, no addenda as allowed per RoR-002-03 R1. The nuts were certified to 1989 Edition, no addenda as allowed per RoR-003-03 R1.

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/11/2011

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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 7/16/10 to 2/1/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California

(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Reactor Coolant System

Date: 2/25/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-206

WO: 800457805

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, W.'71 addenda (Pump)
   ASME Section III, Class 1, 1980 Edition, S. '82 Edition (Mech. Seal)

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0562	N/A	S31201MP004	1979	-------	Yes
RCP Mechanical. Seal	Bingham Willamette	1714880-3	1172	SO23-Cart#22	1986	Removed	Yes
RCP Mechanical. Seal	Bingham Willamette	1714880-2	1171	SO23-Cart#21 Rebuild WO 800062426	1986	Installed	Yes

7. **Description of Work:** The RCP seal cartridge for S31201MP004 was replaced with a spare which had been rebuilt in accordance with the SONGS rebuild program under NMO 800062426. The removed seal cartridge was placed into the SONGS rebuild program under NMO 800605415.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___**

VT-2 Exam. performed per procedure SO23-XVII-3.1.1 Pressure: 2250 psi Test Temp: >280 °F

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 2/28/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 7/19/10 to 2/11/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA 2093 California
(National Board, State, Province, and Endorsements)

Date 4/19/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/18/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7054-2, R2 & 3-M0P-7054-2A

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

WO: 800460433

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

NECP: 800072650, 800072652 and 800072648

Dwgs: 48001 Sh 2 (ECN D0028777), 48001 Sh 3 (ECN D0028780)
SO23-617-1-D113 & D114
SO23-617-1-D613, D1240 & D1241
SO23-617-1-D614, D1242 & D1243
SO23-617-1-D1453, D1478, D1483 & D1266
SO23-617-1-D1495

WP&IR: 25221-003-M0P-7054-00002-000 & WCN 25221-003-M0N-7054-00002

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

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Replacement Steam Generator (RSG)	Mitsubishi Heavy Industries	B-SGP-112	5864	S31301ME089 RSO-0018-10	2010	see block 7	Yes

7. Description of Work: The hydrostatic test caps welded to the vessel primary side nozzles by the manufacturer were cut off and machine beveled in preparation for installation of the replacement vessel. Included in this scope was: one each 42" ID reactor coolant hot leg nozzle, two each 30" ID reactor coolant cold leg nozzles and four 3/4"NPS primary instrument tap nozzles. Surface examinations were performed on the newly machined surfaces of the nozzle bevels and the machine chuck contact areas on the ID of the hot and cold leg nozzles. No indications were found.

After the original steam generator (OSG) was removed, the sliding base was templated and compared with the corresponding bolt holes on the RSG lower support skirt. Some of the studs on the sliding base were slightly out of the expected bolt circle or spacing tolerances. To avoid any potential interference problems during RSG installation, the lower support skirt bolt holes were enlarged in the problem areas (bolt holes #19, 21 & 22).

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

No pressure testing is required for this work scope. Pressure:_____psi Test Temp:_____°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger X Holmes for AB Meichler Supervising ASME Code Engineer Date: 11/18/10
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/13/10 to 11/18/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 11/18/10

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/10/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7055-1

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

WO: 800460434

4. Identification of System: 1301 & 1305 (Main Steam & Feedwater Systems)

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

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Steam Generator	Mitsubishi Heavy Indus.	B-SGP-113	5865	S31301ME088	2010	see block 7	Yes Note (a)

7. Description of Work: The hydrostatic test caps welded to the vessel secondary side nozzles by the manufacturer were cut off and the nozzles machine beveled in preparation for installation of the replacement vessel. Included in this scope were: 18" NPS feedwater nozzle, 38" I.D. main steam nozzle and 4" NPS blowdown nozzle. Surface examinations were performed on the newly machined bevels on the nozzle ends and no defects were found.

Reference: WP&IR 25221-003-M0P-7055-00001-000

Notes:

a). Both primary (tube) and secondary (shell) sides of the Steam Generator were constructed and stamped to ASME III, NB (Code Class 1) requirements.

b). No pressure testing is required for this scope of work.

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

Pressure:___N/A___psi Test Temp:___N/A___°F

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

9. Remarks: None.

(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: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 11/10/10
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 **Minnesota**, and employed by HSB-CT of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05/14/10 to 11/10/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752, A, B, I, N, NS, MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 11/10/10

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1301 & 1305 (Main Steam & Feedwater Systems)

Date: 11/08/2010 Sheet 1 of 1

Unit: 3

Repair/Replacement Plan: 3-M0P-7055-2

WO: 800460435

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Steam Generator	Mitsubishi Heavy Indus.	B-SGP-112	5864	S31301ME089	2010	see block 7	Yes Note (a)

7. **Description of Work:** The hydrostatic test caps welded to the vessel secondary side nozzles by the manufacturer were cut off and the nozzles machine beveled in preparation for installation of the replacement vessel. Included in this scope were: 18" NPS feedwater nozzle, 38" I.D. main steam nozzle and 4" NPS blowdown nozzle. Surface examinations were performed on the newly machined bevels on the nozzle ends and no defects were found.

Reference: WP&IR 25221-003-M0P-7055-00002-000

Notes:

a). Both primary (tube) and secondary (shell) sides of the Steam Generator were constructed and stamped to ASME III, NB (Code Class 1) requirements.

b). No pressure testing is required for this scope of work.

8. **Tests Conducted:** Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:___ Exempt:_X_ Other:___

Pressure:___N/A___psi Test Temp:___N/A___°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichle Supervising ASME Code Engineer Date: 11/9/10
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/14/10 to 11/08/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752, A, B, I, N, NS, MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 11/08/10

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/1/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7057-1, 3-M0P-7057-1.A

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

WO: 800460439
WP&IR: 25221-003-M0P-7057-00001-000(note a)

4. **Identification of System:** 1301 (Main Steam System)
   NECP 800072648, ASC D0037046
   Dwgs: S3-1301-ML-001 Sh 3 (ECN D0039039, PIC D0042148)

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Steam Line N5: S3-1301-1	Pullman Kellogg	N-8935	N/A	spool 3-ST-001-1	1978	see block 7	Yes
		N-6083	N/A	spool 3-ST-001-2	1978		
Φ42 x 2.00" MW Pipe; approx. 3'	Taylor Forge Eng. Systems Inc.	S/N 0460-P01-04 Ht. Code PCMA OA-3	N/A	ILN 10000013556 SA-155 KCF70 Cl 1	2009	Installed	Yes
1-1/4" 6000# SW B2 Boss; RoR-002-07	WFI Nuclear Products, Inc.	Heat Code "5205ANB"	N/A	ILN 10000024059 SA-234-WPB	---	Installed	No
1-1/4" SW Plug; RoR-016-03	Dubose National Energy Services.	Heat Code "BIZ"	N/A	ILN 10000016462 SA-105	---	Installed	No

7. **Description of Work:** A section of main steam piping about 17' long was cut out and temporarily removed to facilitate replacement of steam generator S31301ME088. The vessel end of the removed pipe spool was build-up by welding on the I.D. and machined to match the vessel nozzle bore. The built up area was examined by MT & RT. A short length of new pipe was added (between welds "CK" and "CG") at the downstream end of the removed pipe section to facilitate fit-up during re-installation. All weld preps were examined by PT. The three 42" OD girth welds ("CH", "CK" and "CG") were examined by RT. The attachment weld ("CJ") of the 1-1/4" RT Boss adjacent to weld "CH" was examined by MT and the socket welded plug ("SCR") by PT. Note: The work to the "NF" pipe supports associated with this scope are documented on a separate NIS-2.

The following Preservice Examinations were performed:
42" OD pipe welds: "CH", ISI Designator 03-051-010 and "CG", ISI Designator 03-051-052, MT and UT

Notes: a). The following change notices (WCNs) were issued against WP&IR 25221-003-M0P-7057-00001-000: 25221-003-M0N-7057-00001, 25221-003-M0N-7057-10001, 25221-003-M0N-7057-20001
b). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/pipe weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test and VT-2 Exam were conducted on NMO 800496189, Operation 0060

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** 546 **°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 3/22/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10-14-10 to 01-03-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

E.O. Reyes
Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/1/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7057-2, 3-M0P-7057-2.A

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

WO: 800460481
WP&IR: 25221-003-M0P-7057-00002-000(note a)

4. **Identification of System:** 1301 (Main Steam System)
   NECP 800072648, ASC D0037046
   Dwgs: S3-1301-ML-002 Sh 3 (ECN D0039040, PIC D0042149)

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Steam Line N5: S3-1301-2	Pullman Kellogg	N-8934	N/A	spool 3-ST-001-1	1978	see block 7	Yes
		N-6081	N/A	spool 3-ST-001-2	1978		
Φ42 x 2.00" MW Pipe; approx. 3'	Taylor Forge Eng. Systems Inc.	S/N 0460-P01-04 Ht. Code PCMA OA-3	N/A	ILN 10000013556 SA-155 KCF70 Cl 1	2009	Installed	Yes
1-1/4" 6000# SW B2 Boss; RoR-002-07	WFI Nuclear Products, Inc.	Heat Code "5205ANB"	N/A	ILN 10000024059 SA-234-WPB	---	Installed	No
1-1/4" SW Plug; RoR-016-03	Dubose National Energy Services.	Heat Code "BIZ"	N/A	ILN 10000016462 SA-105	---	Installed	No

7. **Description of Work:** A section of main steam piping about 17' long was cut out and temporarily removed to facilitate replacement of steam generator S31301ME089. The vessel end of the removed pipe spool was build-up by welding on the I.D. and machined to match the vessel nozzle bore. The built up area was examined by MT & RT. A short length of new pipe was added (between welds "CK" and "CG") at the downstream end of the removed pipe section to facilitate fit-up during re-installation. All weld preps were examined by PT. The three 42" OD girth welds ("CH", "CK" and "CG") were examined by RT. The attachment weld ("CJ") of the 1-1/4" RT Boss adjacent to weld "CH" was examined by MT and the socket welded plug ("SCT") by PT. Note: The work to the "NF" pipe supports associated with this scope are documented on a separate NIS-2.

The following Preservice Examinations were performed:
42" OD pipe weld: "CH", ISI Designator 03-050-010, MT and UT

Notes: a). The following change notices (WCNs) were issued against WP&IR 25221-003-M0P-7057-00002-000: 25221-003-M0N-7057-00002 and 25221-003-M0N-7057-10002
b). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/pipe weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test and VT-2 Exam were conducted on NMO 800496189, Operation 0063

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___
Pressure: 1011 **psia** **Test Temp:** 546 **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10-14-10 to 01-03-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

T. O. Dew
Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/5/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7057-5

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

WO: 800460486
WP&IR: 25221-003-M0P-7057-00005-000(note a)

4. Identification of System: 1301 (Main Steam System)
   NECP 800072648, ASC D0037046
   Dwgs: S3-ST-001(DCN 2), S3-ST-001-H-002(DCN 1), S3-ST-001-H-003(DCNs 1-5), S3-ST-001-H-004(DCNs 1-6), S3-ST-001-H-005(DCNs 1-3), S3-ST-001-H-006(DCNs 1-7), S3-ST-001-H-008(DCN 1-3), S3-ST-001-H-009(DCNs 1-5 & ECN A31678)

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

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

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Steam Line	Pullman Kellogg	N5: S3-1301-1	N/A	S3-1301-ML-001	---	see block 7	Yes
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-ST-001-H-001	---	Corrected	--
Support, Snubber	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-002	---	Corrected	--
Support Spring Cans	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-003	---	Corrected	--
Support, Snubber	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-004	---	Corrected	--
Support, Snubber	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-005	---	Corrected	--
Support Spring Cans	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-006	---	Corrected	--
Support, Snubber	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-008	---	Corrected	--
Support, Snubber	Bechtel Power Corp	N/A	N/A	S3-ST-001-H-009	---	Corrected	--

7. Description of Work: A section of main steam piping about 17' long was cut out and temporarily removed to facilitate replacement of steam generator S31301ME088 (pipework is documented on a separate NIS-2). The supports listed above were removed, reinstalled and adjusted to within design tolerances. VT-3 examinations were performed on each support after reinstallation and adjustment.

Notes: a). The following change notices (WCNs) were issued against WP&IR 25221-003-M0P-7057-00005-000: 25221-003-M0N-7057-00005, 25221-003-M0N-7057-10005

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:____ Exempt:___ Other: X
   VT-3: X Pressure: N/A psi Test Temp: N/A °F

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

9. Remarks: None.

(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: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/21/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 06/09/10 to 01/25/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/25/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/21/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7057-6

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

WO: 800460487
WP&IR: 25221-003-M0P-7057-00006-000

4. Identification of System: 1301 (Main Steam System)
NECP 800072648; ISO: S3-1301-ML-002, Sh 3;
Support Dwgs: S3-ST-002-H-001(DCNs 1-3 & ECN A31640), H-002(DCNs 1-4 & ECN A31641), H-003(DCNs 1-6), H-004(DCNs 1-5 & ECN A31642), H-005(DCNs 1-5), H-006(DCNs 1-5), H-006(DCNs 1-5), H-008(DCNs 1-3 & ECN A31644), H-009(DCNs 1-5)

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

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

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Steam Line	Pullman Kellogg	N5: S3-1301-2	N/A	S3-1301-ML-002	---	see block 7	Yes
S3-ST-002-H-001	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-002	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-003	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-004	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-005	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-006	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-008	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No
S3-ST-002-H-009	Bechtel Power Corp	N/A	N/A	----	---	see block 7	No

7. Description of Work: The pipe supports listed above were removed/reinstalled in conjunction with removal/reinstallation of the pipe spool, also listed above. This work scope is associated with the replacement of steam generator S31301ME089. The supports were adjusted after re-installation as necessary to bring them into compliance with the design cold settings. One of the load pins on support S3-ST-002-H-001 was damaged during removal (ref. Bechtel NCR 25221-003-G61-GCX-00092) and was subsequently replaced. The pin replacement is documented on a separate NIS-2 (ref. NMO 800613420). A VT-3 Examination was performed on each the supports after reinstallation and adjustment.

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:___ Exempt:____ Other:_X_
VT-3: _X_ Pressure:___N/A___psi Test Temp:___N/A___°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/21/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 06/09/10 to 01/25/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752 A, B, I, N, NS MN054531

Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/25/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/9/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7058-2

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

WO: 800460489

WP&IR: 25221-003-M0P-7058-00002-000(note a)

4. **Identification of System:** 1305 (Feedwater System)
NECP 800139902, ASC D0040234; Dwgs: S3-1305-ML-190, Sh 2 (ECN A52650 & PIC D0029693), S3-1305-ML-223, Sh 1 (ECN D0001514); SO23-617-14-D10

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (b)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1305-ML-190 20"NPS & 18"NPS	Pullman Kellogg	N-8937 N8940	N/A	Spool S3-FW-190-005 Spool S3-FW-190-006	1978	see block 7	Yes
18"NPS, 47° elbow (BOM item #11)	Taylor Forge	0461-1D	N/A	ILN 10000012552 (NC) SA-234 gr WPC/F43 butter	2009	Installed	Yes
18"NPS, Sch 100 Pipe (BOM item #22)	Tioga Pipe Supply Co., Inc.	Heat # 60839	N/A	RSO 1337-07 SA-106 Gr C	—	Installed	No
S3-1305-ML-223 6"NPS	Pullman Kellogg	N-5668	N/A	Spool 3-FW-223-016	1977	see block 7	Yes

7. **Description of Work:** Piping subassemblies, previously prefabricated on work order 07051497, were installed in the plant in conjunction with replacement of the steam generators. The boundary of this replacement was from the downstream side of check valve S31305MU036 to the nozzle of the replacement steam generator S31305ME089. Also included in this scope was a portion of the 6" auxiliary feedwater line from the branch connection off the main feedwater line up to and not including the second elbow (reverse flow direction). The following 18" & 20" pipe welds were performed "NK", "NF", "NC", "NB", and "NA". The following 6" pipe welds were performed: "NL" and "DW". Preservice Examinations (PSE) were performed on the required welds which included some of the field installation welds and the some welds from the previously prefabricated subassemblies performed on work order 07051497.

Preservice Examinations:
Volumetric & Surface.Examination of Welds: ISI Numbers 03-044-080B (NE), 03-044-070 (NP) and 03-044-010 (NA)

Notes: a). The following change notice (WCN) was issued against WP&IR 25221-003-M0P-7058-00002-000: 25221-003-M0N-7058-00002.
b). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/elbow weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief ISI-3-14.

System Leakage Test and VT-2 Exam conducted on NMO 800496189, Operation 0072

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**__X__ **Exempt:**___ **Other:**___
Pressure:____1011____**psia** **Test Temp:**____546____**°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 5-24-10 to 01-10-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/29/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7058-1, Rev 2

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

WO: 800460490

WP&IR: 25221-003-M0P-7058-00001-000(note a)

4. **Identification of System:** 1305 (Feedwater System)
NECP 800139902, ASC D0040234; Dwgs: S3-1305-ML-189, Sh 2 (ECN A52649 & PIC D0029695), S3-1305-ML-222, Sh 1 (ECN D0042276), SO23-617-14-D10

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (b)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1305-ML-189 20"NPS & 18"NPS	Pullman Kellogg	N-8936 N-8941	N/A	Spool S3-FW-189-005 Spool S3-FW-189-006	1980	see block 7	Yes
18"NPS, 47° elbow (BOM item #10)	Taylor Forge	0461-1B	N/A	ILN 10000012552 (NC) SA-234 gr WPC/F43 butter	2009	Installed	Yes
18"NPS, Sch 100 Pipe (BOM item #17)	Tioga Pipe Supply Co., Inc.	Heat # 60839	N/A	RSO 1337-07 SA-106 Gr C	—	Installed	No
S3-1305-ML-222 6"NPS	Pullman Kellogg	N-5751	N/A	Spool S3-FW-222-008	1982	see block 7	Yes

7. **Description of Work:** Piping subassemblies, previously prefabricated on work order 07051478, were installed in the plant in conjunction with replacement of the steam generators. The boundary of this replacement was from the downstream side of check valve S31305MU129 to the nozzle of the replacement steam generator S31305ME088. Also included in this scope was a portion of the 6" auxiliary feedwater line from the branch connection off the main feedwater line up to and including the second elbow (reverse flow direction). The following 18" & 20" pipe welds were performed "BU", "BQ", "BM", "BL", and "BK". The following 6" pipe welds were performed: "BW", "Q", and "R". Preservice Examinations (PSE) were performed on both the field installation welds and the welds of previously prefabricated subassemblies performed on work order 07051478.

Preservice Examinations:
Volumetric & Surface.Examination of Welds: ISI Numbers 03-045-310A (BP), 03-045-360 (BK) and 03-047-010 (BW)

Notes: a). The following change notice (WCN) was issued against WP&IR 25221-003-M0P-7058-00001-000: 25221-003-M0N-7058-00001 and 25221-003-M0N-7058-10001.
b). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/elbow weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief ISI-3-14.

System Leakage Test and VT-2 Exam conducted on NMO 800496189, Operation 0071

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**__X__ **Exempt:**___ **Other:**__
Pressure:____1011____psia **Test Temp:**____546____°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05-24-10 to 12-30-10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/9/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7058-3

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

WO: 800460492

WP&IR: 25221-003-M0P-7058-00003-000(note a)

4. Identification of System: 1305 (Feedwater System)
NECP 800139902, ASC D0040234
Dwgs: S3-FW-189-H-010 (DCNs 4-9), S3-FW-189-H-011 (DCNs 1-3), S3-FW-189-H-012 (DCNs 5-7), S3-FW-189-H-013 (DCNs 1-3 & ECN D0042630), S3-FW-189-H-014 (DCNs 3-7), S3-FW-189-H-015 (DCNs 1-7 & 9), S3-FW-189-H-016 (DCNs 1-4), S3-FW-189-H-017 (DCNs 2-5 & ECN D0000732), S3-FW-222-H-009 (DCNs 1-2)

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

5. (a) Applicable Construction Code: ASME Section III, NF, Class 2, 1974 Edition, Summer 1974 Addenda [see note (b)]

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Feedwater Line	Pullman Kellogg	N5: S3-1305-8	N/A	S3-1305-ML-189	---	see block 7	Yes
Support, Snubbers	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-010	—	Installed	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-011	—	Corrected	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-012	—	Installed	No
Support, Snubbers	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-013	—	Installed	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-014	—	see block 7	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-015	—	Corrected	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-016	—	see block 7	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-189-H-017	—	see block 7	No
Aux Feedwater Line	Pullman Kellogg	N5: S3-1305-6	N/A	S3-1305-ML-222	---	see block 7	Yes
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-222-H-009	—	Corrected	No

7. Description of Work:
The pipe support work in this scope was associated with the replacement of a segment of the feedwater line and replacement of the steam generator S31305ME088. The existing end plates (with snubber rear brackets left intact) were welded (NF welds) to the new dummy stubs of the replacement pipe spool on supports S3-FW-189-H-010, H-012 & H-013. No new materials were used. The snubbers on supports S3-FW-189-H-014 & H-017 were temporarily removed and then replaced after the replacement pipe was installed. The spring hanger supports S3-FW-189-H-015 and S3-FW-222-H-009 were blocked before removing the old pipe and unblocked/ adjusted after the replacement pipe was installed. Spring hanger S3-FW-189-H-016 was blocked and unblocked, but required no adjustment. Spring hanger S3-FW-189-H-011 was removed from the replaced pipe section and re-installed on the replacement pipe. VT-3 examinations were performed where required after the above supports were restored.

Notes:
a). The following change notice was issued against WP&IR 25221-003-M0P-7058-00003-000: 25221-003-M0N-7058-00003.
b). The welding NDE methodology/acceptance criteria for welds was NF-5000, 1995 Edition, 1996 Addenda per Relief ISI-3-14.

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:____ Exempt:___ Other: X
VT-3: X Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/21/11
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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/26/10 to 01/24/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Clarke
Inspector's Signature

Commissions NB6752 A, B, I, N, NS MN054531
(National Board, State, Province, and Endorsements)

Date 01/24/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/20/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7058-5

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

WO: 800460492

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

4. Identification of System: 1305 (Feedwater System)

Dwgs: SO23-617-D110, D419 & D420; S3-1305-ML-189 Sh 2, ECN A52649, PIC D0029695

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Steam Generator	Mitsubishi Heavy Indus.	B-SGP-113	5865	S31301ME088 RSO-0018-10	2010	see block 7	Yes Note (a)

7. Description of Work: An arc strike documented on Bechtel NCR 25221-003-G61-GCX-00102 was found on the vessel feed water nozzle adjacent to pipe/nozzle weld "BK". The area was ground to remove all visual signs of the arc strike. An additional 1/16" of material was then removed to ensure complete removal of the arc strike heat affected material. The ground area was then blended into the surrounding surfaces. The resultant repair cavity major dimensions were documented as: 1" long x 5/8" wide X 3/32" deep. The final repair area was examined by MT with satisfactory results.

Reference: WP&IR 25221-003-M0P-7058-00005-000

Notes:

a). Both primary (tube) and secondary (shell) sides of the Steam Generator were constructed and stamped to ASME III. NB (Code Class 1) requirements.

b). No pressure testing is required for this scope of work.

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

Pressure:___N/A___psi Test Temp:___N/A___°F

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA

9. Remarks: None.

(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: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 12/20/10
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 11/30/10 to 12/20/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K E Blake Commissions NB6752, A, B, I, N, NS, MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 12/20/10

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/9/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7058-4

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

WO: 800460493

WP&IR: 25221-003-M0P-7058-00004-000(note a)

4. Identification of System: 1305 (Feedwater System)
NECP 800139902, ASC D0040234
Dwgs: S3-FW-190-H-011 (DCNs 6-7 & ECN D0009054), S3-FW-190-H-012 (DCNs 1-3), S3-FW-190-H-013 (DCNs 1 & 4-7, ECN D0009057), S3-FW-190-H-014 (DCNs 5-6 & ECN D0000736), S3-FW-190-H-015 (DCNs 2-4 & 6-7), S3-FW-190-H-016 (DCNs 1-6), S3-FW-190-H-017 (DCNs 1-3), S3-FW-190-H-018 (DCNs 2, 4-6 & ECN D0009059), S3-FW-223-H-001

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

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Main Feedwater Line	Pullman Kellogg	N5: S3-1305-7	N/A	S3-1305-ML-190	---	see block 7	Yes
Support, Snubbers	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-011	—	Installed	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-012	—	Corrected	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-013	—	Installed	No
Support, Snubbers	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-014	—	Installed	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-015	—	see block 7	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-016	—	Corrected	No
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-017	—	Corrected	No
Support, Snubber	Bechtel Power Corp.	N/A	N/A	S3-FW-190-H-018	—	see block 7	No
Aux Feedwater Line	Pullman Kellogg	N5: S3-1305-5	N/A	S3-1305-ML-223	---	see block 7	Yes
Support, Spring Can	Bechtel Power Corp.	N/A	N/A	S3-FW-223-H-001	—	Corrected	No

7. Description of Work:
The pipe support work in this scope was associated with the replacement of a segment of the feedwater line and replacement of the steam generator S31305ME089. The existing end plates (with snubber rear brackets left intact) were welded (NF welds) to the new dummy stubs of the replacement pipe spool on supports S3-FW-190-H-011, H-013 & H-014. No new materials were used. The snubbers on supports S3-FW-190-H-015 & H-018 were temporarily removed and then replaced after the replacement pipe was installed. The spring hanger supports S3-FW-190-H-016, H-017 and S3-FW-223-H-001 were blocked before removing the old pipe and unblocked/ adjusted after the replacement pipe was installed. Spring hanger S3-FW-190-H-012 was removed from the replaced pipe section and re-installed on the replacement pipe. VT-3 examinations were performed on all of the above supports after restoration.

Notes:
a). The following change notice was issued against WP&IR 25221-003-M0P-7058-00004-000: 25221-003-M0N-7058-00004.
b). The welding NDE methodology/acceptance criteria for welds was NF-5000, 1995 Edition, 1996 Addenda per Relief ISI-3-14.

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:____ Exempt:___ Other:_X_
VT-3: _X_ Pressure:____N/A_____psi Test Temp:_____N/A _____°F

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

9. Remarks: None.

(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: Roger T Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/21/11
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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/26/10 to 01/25/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/25/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/11/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7059-1.2

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

WO: 800460494

WP&IR: 25221-003-M0P-7059-00001-000

4. **Identification of System:** 1301 (Main Steam System)

NECP 800072650; Dwg: S3-1301-ML-1473, Sh 1 (ECN D0029068)
Dwg: SO23-408-1-6-72

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Stem Generator 3ME088 Recirc. Line	----	----	----	S3-1301-ML-1473	---	Installed	No
3" 600# WNRF (BOM item #5)	Consolidated Pipe and Supply	Heat # 5094ANF	N/A	ILN 10000022507 (NC) 1998 Ed, 2000 Add SA-350 gr LF2 (note c)	---	Installed	No
3"NPS Sch 80 (BOM item #4)	Dubose National Energy Services	Heat # 86067 Trace # 36292	N/A	ILN 10000022330 (NC) 1998 Ed, 2000 Add SA-333 gr 6 (note b)	---	Installed	No
3" 600# Gate Mark # 129 (BOM item # 3)	Flowserve Corp.	BH-540	N/A	S31301MU1495 ILN 10000012401 (NC) 1971 Ed, S'1973Add SA-352 gr LCB	2009	Installed	Yes

7. **Description of Work:** The 3" NPS recirculation piping spool was fabricated and installed on flanged nozzle connection of the replacement steam generator (RSG) 3ME088. The 3" pipe welds "A" and "B" were performed. The existing studs and nuts supplied with the RSG (ref SO23-617-1-D159, items 13 & 15) by MHI were used.

Notes:

a). The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.
b). Reconciliation RoR-019-03 applies.
c). Reconciliation RoR-018-03 applies.

System Leakage Test and VT-2 Exam were conducted on NMO 800496189, Operation 0064

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**__X__ **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** 546 **°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05-21-10 to 12-15-10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. O. Rew
Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 5-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/12/2010 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7059-1.2

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

WO: 800460495

WP&IR: 25221-003-M0P-7059-00002-000

4. **Identification of System:** 1301 (Main Steam System)

NECP 800072650; Dwg: S3-1301-ML-1476, Sh 1 (ECN D0029071)
Dwg: SO23-408-1-6-72

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Stem Generator 3ME089 Recirc. Line	----	----	----	S3-1301-ML-1476	---	Installed	No
Hvy Hex Nuts, 16 ea, 3/4"-10UNC (BOM item #7)	Nova Machine Products	Heat # S68752	N/A	ILN 10000010838 (NC) 1974 Ed, S'1974 Add SA-194 Gr 2H	—	Installed	No
Studs, 8 ea, 3/4"-10UNC, 5-1/2" Lg. (BOM item #6)	Nova Machine Products	Heat # 3001306	N/A	ILN 10000010838 (NC) 1974 Ed, S'1974 Add SA-194 Gr B7	—	Installed	No
3" 600# WNRF (BOM item #5)	Consolidated Pipe and Supply	Heat # 5094ANF	N/A	ILN 10000022507 (NC) 1998 Ed, 2000 Add SA-350 gr LF2 (note c)	---	Installed	No
3"NPS Sch 80 (BOM item #4)	Dubose National Energy Services	Heat # 86067 Trace # 36292	N/A	ILN 10000022330 (NC) 1998 Ed, 2000 Add SA-333 gr 6 (note b)	---	Installed	No
3" 600# Gate Mark # 129 (BOM item # 3)	Flowserve Corp.	BH-537	N/A	S31301MU1498 ILN 10000012401 (NC) 1971 Ed, S'1973Add SA-352 gr LCB	2009	Installed	Yes

7. **Description of Work:** The 3" NPS recirculation piping spool was fabricated and installed on flanged nozzle connection of the replacement steam generator (RSG) 3ME089. The 3" pipe welds "A" and "B" were performed.

Notes: a). The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.
b). Reconciliation RoR-019-03 applies.
c). Reconciliation RoR-018-03 applies.

System Leakage Test and VT-2 Exam conducted on NMO 800496189, Operation 0070

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**__X__ **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** 546 **°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05-21-10 to 12-13-10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

E.O. [illegible] Commissions NB12050 A, N, I CA1969
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. Identification of System: N/A

Dwgs: SO23-508-16-18; 56855 Sh 1, ECN D0027187 (loose part monitor)
SO23-508-5-2, ECN D0038334 (temperature element)
SO23-617-1-D1499, ECN D0044426 (3ME088 as-built)
SO23-617-1-D1493, ECN D0044424 (3ME089 as-built)

Date: 1/11/2011 Sheet 1 of 1

Unit: 3

Repair/Replacement Plans: 3-M0P-7062-9 Rev 1

WO: 800461227

NECP: 800072644

WP&IR: 25221-003-M0P-7062-00009-000 & WCN 25221-003-M0N-7062-00009

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

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-113	5865	S31301ME088 RSO-0018-10	2010	see block 7	Yes
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-112	5864	S31301ME089 RSO-0018-10	2010	see block 7	Yes

7. Description of Work: This work scope includes installing loose part monitor sensors (2 places per RSG) and temperature sensors (2 places per RSG) in conjunction with installation of new replacement steam generators. The ASME XI Repair/Replacement Activity included drilling/tapping into the vessel shell and skirt to mount the sensors. The temperature sensors were mounted with 4 each #10-32UNF fasteners and the loose part monitors were mounted with 5 each #10-32UNF fasteners.

3ME088, temperature sensors 3TE1126A (top of tubesheet), 3TE1126B (top of tube bundle), loose part monitor sensors 3NE1206 and 3NE1207 (approximately 180° apart on lower support skirt). Explicit locations shown on referenced as-built dwgs.

3ME089, temperature sensors 3TE1116A (top of tubesheet), 3TE1116B (top of tube bundle), loose part monitor sensors 3NE1204 and 3NE1205 (approximately 180° apart on lower support skirt). Explicit locations shown on referenced as-built dwgs.

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

No pressure testing is required for this scope Pressure:___N/A___ psi Test Temp:___N/A___°F

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

FORM NIS-2 (back)

9. Remarks: _____

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and 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: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/11/11

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 **Minnesota** and employed by **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05/28/10 to 01/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A, B, I, N, NS MN054531

Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/12/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/18/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7063-1

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

WO: 800461229

WP&IR: 25221-003-M0P-7063-00001-000 [note(a)]

4. Identification of System: N/A (Steam Generator Support)

NECP 800072652 (ASCs D0028797 & D0044452); Dwg: S023-916-18 (ECN D0044452), SO23-617-1-D1501(ECN D0041125) & SO23-617-3E-D9

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

5. (a) Applicable Construction Code: ASME Section III, NF (Class 1), 1974 Edition, Summer 1974 Addenda [note (b)]

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Stamped Yes/No
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-113	5865	S31301ME088	2010	see block 7	Yes
Steam Generator Sliding Base Support	Combustion Engineering	N/A	N/A	lower support for RSG S31301ME088	---	see block 7	No
Studs. 15 each	Nova Machine Products	Heat#5070686A4435 Trace 2W58	N/A	ILN 10000009056 SA-540 gr B23 Class 1	---	Installed	No
Studs. 24 each	Nova Machine Products	Heat # 8091264 Trace 4E88	N/A	ILN 10000023611 SA-540 gr B23 Class 1	---	Installed	No
Nuts, 25 each	Nova Machine Products	Heat#7568273A4936 Trace 2W62	N/A	ILN 10000008140 SA-540 gr B23 Class 1	---	Installed	No
Nuts. 8 each	Nova Machine Products	Heat# 8093750 Trace 4E68	N/A	ILN 10000023610 SA-540 gr B23 Class 1 NN 201262794 (note c)	---	Installed	No
Nuts, 3 each	Nova Machine Products	Heat# 91249 Trace 5E64	N/A	ILN 10000031206 SA-540 gr B23 Class 1	---	Installed	No

7. Description of Work: Four of the 42 bolt hole locations on the skirt/sliding base were abandoned (no studs in the holes). Studs were omitted from hole #9 and #21 due to hole misalignment between skirt/base and studs were omitted on hole #12 and #35 due to field problems getting the replacement bolting installed. The as-left condition is as follows: One existing stud was reused and 37 new studs were used. Two existing nuts were reused and 36 new nuts were used. Studs were 2-1/4-16UN-2A, 17-3/4" long and nuts were heavy hex, 2-1/4-16UN-2B, 3-1/4" thick. A VT-3 examination was performed on the support after complete assembly.

Notes: a). The following change notices were issued against the WP&IR: 25221-003-M0N-7063-00001 & 10001
b). The vessel construction code was ASME III, NB, 1998 Edition, 2000 Addenda; the support skirt is an "NF" item.
c). Replacement material did not meet Charpy lateral expansion requirement of NF-2333-1. An Appendix G evaluation was performed to justify using replacement material.

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:____ Exempt:___ Other:___
No pressure testing is required for this scope. Pressure:____N/A_____ psi Test Temp:____N/A_____°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/19/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/25/10 to 01/20/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/20/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/18/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7063-3

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

WO: 800461231

WP&IR: 25221-003-M0P-7063-00003-000

4. Identification of System: N/A (Steam Generator Support)

NECP 800072652 (ASCs D0028797 & D0044452); Dwg: S023-916-18 (ECN D0044452), SO23-617-1-D1501(ECN D0041125) & SO23-617-3E-D9

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

5. (a) Applicable Construction Code: ASME Section III, NF (Class 1), 1974 Edition, Summer 1974 Addenda [note (a)]

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Stamped Yes/No
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-112	5864	S31301ME089	2010	see block 7	Yes
Steam Generator Sliding Base Support	Combustion Engineering	N/A	N/A	lower support for RSG S31301ME089	---	see block 7	No
Studs, 17 each	Nova Machine Products	Heat#5070686A4435 Trace 2W58	N/A	ILN 10000009056 SA-540 gr B23 Class 1	---	Installed	No
Studs, 4 each	Nova Machine Products	Heat # 8091264 Trace 4E88	N/A	ILN 10000023611 SA-540 gr B23 Class 1	---	Installed	No
Nuts, 25 each	Nova Machine Products	Heat# 8093750 Trace 4E68	N/A	ILN 10000023610 SA-540 gr B23 Class 1 NN 201262795 (note b)	---	Installed	No

7. Description of Work: The as-left condition is as follows: 21 existing studs were reused and 21 new studs were used. 17 existing nuts were reused and 25 new nuts were used. Studs were 2-1/4-16UN-2A, 17-3/4" long and nuts were heavy hex, 2-1/4-16UN-2B, 3-1/4" thick. A VT-3 examination was performed on the support after complete assembly.

Notes: a). The vessel construction code was ASME III, NB, 1998 Edition, 2000 Addenda; the support skirt is an "NF" item.
c). Replacement material did not meet Charpy lateral expansion requirement of NF-2333-1. An Appendix G evaluation was performed to justify using replacement material.

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:____ Exempt:___ Other:___
No pressure testing is required for this scope. Pressure:____N/A_____ psi Test Temp:___N/A_____°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/19/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/25/10 to 01/20/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K L Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/20/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/11/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7063-2

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

WO: 800461232

NECP: 800072652, ASC D0028797 & D0037486

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

WP&IR: 25221-003-M0P-7063-00002-000

Dwgs: SO23-617-1-D893
SO23-915-45 (ECNs A51481 & PIC D0031128)
SO23-917-1, sh 1 (ECN D0028744)

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

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-113	5865	S31301ME088 RSO-0018-10	2010	Installed	Yes
Upper Snubber Support Lug	---	---	N/A	Snubber S3RCE88H001 East 270° location	---	see block 7	No
Upper Snubber Support Lug	—	---	N/A	Snubber S3RCE88H002 West, 90° location	---	see block 7	No

7. Description of Work: The replacement steam generator upper support snubber lugs, welded to the vessel, were supplied without the support load pin holes because the pin hole locations had to be determined by the field after the vessel was set. Once the locations were determined, the holes were bored in the lugs. The new material surfaces created by the machining were PT examined. A VT-3 examination was performed on both supports after the supports were completely assembled. No replacement materials were installed in this work scope.

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

No pressure testing is required for this scope Pressure:___N/A___psi Test Temp:___N/A___°F

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

9. Remarks: None.

(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: Roger L Holmes for AB Michler Supervising ASME Code Engineer Date: 1/11/11
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 Minnesota and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/21/10 to 01/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake
Inspector's Signature

Commissions NB6752 A. B. I. N. NS MN054531
(National Board, State, Province, and Endorsements)

Date 01/12/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/11/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7063-4

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

WO: 800461233

NECP: 800072652, ASC D0028797 & D0037486

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

WP&IR: 25221-003-M0P-7063-00004-000

Dwgs: SO23-617-1-D892
SO23-915-45 (ECNs A51481 & PIC D0031128)
SO23-917-1, sh 1 (ECN D0028744)

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

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1998 Edition, 2000 Addenda

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-112	5864	S31301ME089 RSO-0018-10	2010	Installed	Yes
Upper Snubber Support Lug	---	---	N/A	Snubber S3RCE89H001 East 90° location	---	see block 7	No
Upper Snubber Support Lug	—	---	N/A	Snubber S3RCE89H002 West, 270° location	---	see block 7	No

7. Description of Work: The replacement steam generator upper support snubber lugs, welded to the vessel, were supplied without the support load pin holes because the pin hole locations had to be determined by the field after the vessel was set. Once the locations were determined, the holes were bored in the lugs. The new material surfaces created by the machining were PT examined. A VT-3 examination was performed on both supports after the supports were completely assembled. No replacement materials were installed in this work scope.

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

No pressure testing is required for this scope Pressure:___N/A___psi Test Temp:___N/A_____°F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/11/11
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 **Minnesota** and employed by **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05/24/10 to 01/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake
Inspector's Signature

Commissions NB6752 A. B. I. N. NS MN054531
(National Board, State, Province, and Endorsements)

Date 01/12/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/1/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7064-3, Rev 1

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

WO: 800461242, 800461243

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

Dwgs: NCEP 800072652, ASC D0028797 & D0037486 S3-1201-ML-002, Sh 1 (ECN D0028785); S3-1201-ML-004, Sh 1 (ECN D0028787); S3-1201-ML-006, Sh 1 (ECN D0028788); 48001, Sh 1(ECN D0042085); 48001 Sh 2(ECN D0028777); 48001, Sh 3(ECN D0042084)

WP&IR: 25221-003-M0P-7064-00003-001 & WCN 25221-003-M0N-7064-00003
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1998 Edition, 2000 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed or Installed	ASME Code Stamped Yes/No
Existing Steam Generator	Combustion Engr.	72270-2	22265	S3-1301-ME-088	1977	Removed	Yes
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-113	5865	RSO-0018-10	2010	Installed	Yes
Φ42" Hotleg	Combustion Engr.	503-03/717-05	N/A	S3-1201-ML-002	1977 & 1981	see block 7	Yes
Φ30" Coldleg, RCP P004	Combustion Engr.	504-06-4	N/A	S3-1201-ML-004	1977	see block 7	Yes
Φ30" Coldleg, RCP P002	Combustion Engr.	504-06-3	N/A	S3-1201-ML-006	1978	see block 7	Yes

7. **Description of Work:** The existing steam generator was replaced. The Code Class 1 connecting piping listed above in block 6 was welded to the nozzles of the replacement vessel. The construction code NDE included surface exams of the weld preps, surface exams of final welds and RT of final welds. The final weld NDE was performed after PWHT with the exception of the carbon steel groove weld and cladding covering this weld on the ID which was performed separately before PWHT. The thermocouple removal areas were examined by MT. The Preservice Examinations performed on the welds are summarized below.

Preservice Examinations Performed:

- Fab Weld ID "C" (ML-002 hotleg), ISI Number 03-007-001 (volumetric)
- Fab Weld ID "E" (ML-004 coldleg), ISI Number 03-014-017 (volumetric)
- Fab Weld ID "E" (ML-006 coldleg), ISI Number 03-012-017 (volumetric)
- VT-3 Examinations performed on the vessel supports are documented on separate NIS-2's

Note: a). Reactor Coolant Pipe construction code edition is 1971 Edition, Summer 1972 Addenda. The vessel code was used for the vessel/pipe welds. The welding NDE methodology and acceptance criteria for the all welds was NB-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test was conducted per procedure SO23-XVII-3.1.1 (signed by ANII on 2/11/2011)

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

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 3/7/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9-3-10 to 01-5-11 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

L.O. Rew
Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 5-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/31/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plans: 3-M0P-7064-4, Rev 3

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

WO: 800461245

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

Dwgs: NCEP 800072652, ASC D0028797 & D0037486
S3-1201-ML-001, Sh 1 (ECN D0028784); S3-1201-ML-003, Sh 1 (ECN D0028786); S3-1201-ML-005, Sh 1 (ECN D0028789); 48001, Sh 1(ECN D0042085); 48001 Sh 2(ECN D0028777); 48001, Sh 3(ECN D0042084)

WP&IR: 25221-003-M0P-7064-00004-001 & WCN 25221-003-M0N-7064-00004
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1998 Edition, 2000 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed or Installed	ASME Code Stamped Yes/No
Existing Steam Generator	Combustion Engr.	72270-1	22264	S3-1301-ME-089	1977	Removed	Yes
Replacement Steam Generator	Mitsubishi Heavy Industries	B-SGP-112	5864	RSO-0018-10	2010	Installed	Yes
Φ42" Hotleg	Combustion Engr.	503-01/717-01	N/A	S3-1201-ML-001	1977 & 1981	see block 7	Yes
Φ30" Coldleg, RCP P001	Combustion Engr.	504-06-2	N/A	S3-1201-ML-003	1977	see block 7	Yes
Φ30" Coldleg, RCP P003	Combustion Engr.	504-06-1	N/A	S3-1201-ML-005	1978	see block 7	Yes

7. **Description of Work:** The existing steam generator was replaced. The Code Class 1 connecting piping listed above in block 6 was welded to the nozzles of the replacement vessel. The construction code NDE included surface exams of the weld preps, surface exams of final welds and RT of final welds. The final weld NDE was performed after PWHT with the exception of the carbon steel groove weld and cladding covering this weld on the ID which was performed separately before PWHT. The thermocouple removal areas were examined by MT. The Preservice Examinations performed on the welds are summarized below.

Preservice Examinations Performed:

- Fab Weld ID "C" (ML-001 hotleg), ISI Number 03-006-001 (volumetric)
- Fab Weld ID "E" (ML-003 coldleg), ISI Number 03-010-017 (volumetric)
- Fab Weld ID "E" (ML-005 coldleg), ISI Number 03-008-017 (volumetric)
- VT-3 Examinations performed on the vessel supports are documented on separate NIS-2's

Note: a). Reactor Coolant Pipe construction code edition is 1971 Edition, Summer 1972 Addenda. The vessel code was used for the vessel/pipe welds. The welding NDE methodology and acceptance criteria for the all welds was NB-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test was conducted per procedure SO23-XVII-3.1.1 (signed by ANII on 2/11/2011)

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

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for A.B. Meichler Supervising ASME Code Engineer Date: 3/7/2011

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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 01-03-10 to 01-03-11 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB12050 A, N, I CA1969

(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. ***Identification of System:*** 1301 (Main Steam System)

NECP 040901164-39, ASC D0037076, PIC D0039924
S3-1301-ML-015, Sh 1, ECNs A47702, D0042697 & PIC D0041642

Date: 1/13/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 3-M0P-7065-2

WO: 800461250

WP&IR: 25221-003-M0P-7065-00002-000

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4"NPS & 3NPS Blowdown Line	Pullman Kellogg and Bechtel	N5: S3-1301-1	N/A	S3-1301-ML-015	1978	see block 7	Yes
4" x 3" BW Swage (BOM item #25)	Tioga Pipe Supply Co.	Heat F0788 Heat Code 5019ANC	N/A	ILN 10000024667 (NC) SA-234 gr WP22	—	Installed	No
3", Mark 129 Gate Vv	Anchor/Darling	2N694	N/A	S31301MU013	1976	Removed	Yes
replacement for above (BOM item #35)	Flowserve	BH539	N/A	S31301MU013 ILN 10000012401 (NC)	2009	Installed	Yes
3"NPS, Sch 80 Pipe, (BOM item # 24)	DuBose National Energy Services	Heat # 00A071963	N/A	ILN 10000023627 (NC) SA-335 gr P22	---	Installed	No
6 each, 3"NPS Sch 80 BW, LR 90° El's (BOM items #26 & #36)	Energy and Process Corp.	Heat# M8456	N/A	ILN 10000024168 (NC) SA-234 gr WP22S	---	Installed	No

7. **Description of Work:** A portion of the blowdown piping was rerouted in conjunction with replacement of the S31305ME088 steam generator. The associated pipe support work is documented on a separate NIS-2. The boundary of this replacement is defined on drawing S3-1301-ML-015 Sh 1 and the associated changes listed above. The following 4" pipe weld was performed: "CL". The following 3" pipe welds were performed: "CM", "CN", "CP", "CQ", "CR", "CS", "CT", "CU", "CV", "CW", "CX", "CY", "CZ", "PA", and "PB". The new materials used are listed above.

Notes:
a). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/elbow weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test and VT-2 Exam was conducted on NMO 800496189, Operation 0073

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** 546 **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is [illegible] 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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05-24-10 to 01-14-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB12050 A, N, I CA1969
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/3/2011 — Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7065-4

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

WO: 800461251

WP&IR: 25221-003-M0P-7065-00004-000

4. **Identification of System:** 1301 (Main Steam System)

NECP 040901164-39, ASC D0037076, PIC D0039924
S3-1301-ML-016, Sh 1 (ECN D0030720)

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4"NPS & 3NPS Blowdown Line	Pullman Kellogg and Bechtel	N5: S3-1301-2	N/A	S3-1301-ML-016	1978	see block 7	Yes
1 each, 4" x 3" BW 90° Reducing Elbow, Sch 80, 4" radius, (BOM item #21)	Tioga Pipe & Supply, Inc.	Heat Code 3272ANG1 Heat# Y0924	N/A	ILN 10000025913 (NC) SA-234 gr WP22	---	Installed	No
Approx. 22', 3"NPS, Sch 80 Pipe, (BOM item # 20)	DuBose National Energy Services	Heat # 00A071963	N/A	ILN 10000023627 (NC) SA-335 gr P22	---	Installed	No
3 each, 3"NPS Sch 80 BW, LR 90° Elbows (BOM item #19)	Energy and Process Corp.	Heat# M8456	N/A	ILN 10000024168 (NC) SA-234 gr WP22S	---	Installed	No

7. **Description of Work:** A portion of the blowdown piping was rerouted in conjunction with replacement of the S31305ME089 steam generator. The boundary of this replacement is defined on ECN D0030720 to drawing S3-1301-ML-016 Sh 1. The following 4" pipe weld was performed: "M". The following 3" pipe welds were performed: "N", "Q", "R", "S", "T", "U", "V", "W", and "X". The materials used are listed above.

Notes:
a). Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/elbow weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

System Leakage Test and VT-2 Exam was conducted on NMO 800496189, Operation 0074

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: 1011 **psia** **Test Temp:** 546 **°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 2/15/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05-24-10 to 04-04-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1301 (Main Steam System)

NECP 040901164-39, ASC D0037076, PIC D0039924
S3-1301-ML-015, Sh 4, ECN D0042473, PICD0036711, D0035453, D0031851

Date: 1/10/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 3-M0P-7065-8

WO: 800461252

WP&IR: 25221-003-M0P-7065-00008-000 and WCN 25221-003-M0N-7065-00008

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

5. (a) **Applicable Construction Code:** ASME Section III, NF; Class 2, 1974 Edition, Summer 1974 Addenda [see note (a)]

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Stamped Yes/No
S31305ME088 Blowdown Line	Bechtel	N5: S3-1301-1	N/A	S3-1301-ML-015	---	see block 7	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-701	---	Removed	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-702	---	Removed	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-703	---	Removed	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-704	---	Removed	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-722	---	Removed	No
Pipe Support	Bechtel	N/A	N/A	S3-ST-015-H-723	---	Removed	No
Spring Can Support Assy	Anvil Int'l	see note b	N/A	S3-ST-015-H-801	---	Installed	No
Sway Strut, Fig 211N, Size A; (BOM item #14)	Anvil Int'l	see note c	N/A	S3-ST-015-H-802 ILN 10000025305	---	Installed	No
Sway Strut, Fig. 211N, Size B; (BOM item # 16)	Anvil Int'l	see note c	N/A	S3-ST-015-H-803 ILN 10000025844	---	Installed	No
3" Pipe Strap, Fig CL144N (BOM item # 20)	Anvil Int'l	Ht. Code JG6449	N/A	S3-ST-015-H-804 ILN 10000025838	---	Installed	No

7. **Description of Work:**
A portion of the blowdown piping was rerouted in conjunction with replacement of the S31305ME088 steam generator. The scope of this replacement includes the "NF" pipe support work associated with the piping reroute. The pipe supports listed above were removed/installed as part of this scope. The replacement hardware was certified to NF, Code Class 2. Each of the new supports installed required "NF" welds for installation.

Notes:
a) Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel nozzle weld. The welding NDE methodology and acceptance criteria for all welds was NF-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.

b) The new spring can support assembly included the following individual parts: Anvil, Fig 82N variable spring, size 6, type B, ILN 10000025839; Anvil, Fig 66N, 5/8" welded beam attachment, ILN 10000025840; Anvil, Fig 140N, 5/8" rod, Heat #325236, ILN 10000025841; Anvil, Fig 290N, 5/8" weldless eye nut, Heat #S76555, ILN 10000025842; Anvil, Fig 295N, 3" double bolt clamp, 3" pipe, ILN 100000843; Mackson, 5/8"-11, heavy hex nuts, 2 each, SA-194 2H, Trace "LWV", RSO 0968-07.

c) Strut assemblies were not serialized. Refer to ILN package for itemization of material heat numbers used for fabrication.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___
No VT-3 exam was required for this scope (IWF-1230) **Pressure:** N/A **psi** **Test Temp:** N/A **°F**

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

9. Remarks: None.

(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: Roger E Holmes for ABMeichler Supervising ASME Code Engineer Date: 1/11/11
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 **Minnesota**, and employed by **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 05/25/10 to 01/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A. B. I. N. NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/12/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/5/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-M0P-7065-9, Rev 1

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

WO: 800461253

WP&IR: 25221-003-M0P-7065-00009-000

4. Identification of System: 1301 (Main Steam System)

NECP 040901164-39, ASC D0037076, PIC D0039924
S3-1301-ML-016, Sh 5, ECN D0043290

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

5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda [see note (a)]

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

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Blowdown Line for S31305ME089	Bechtel	N/A	N/A	S3-1301-ML-016	---	see block 7	No
Sway Strut, Fig. 211N, Size B; (BOM item #1)	Anvil International	note b	N/A	S3-ST-016-H-801 ILN 10000027905 (NF-2)	---	Installed	No
Sway Strut, Fig. 211N, Size B; (BOM item # 12)	Anvil International	note b	N/A	S3-ST-016-H-802 ILN 10000025845 (NF-2)	---	Installed	No

7. Description of Work: A portion of the blowdown piping was rerouted in conjunction with replacement of the S31305ME089 steam generator. The scope of this replacement includes the "NF" pipe support work associated with the rerouting a section of the blowdown line. The two pipe supports listed above were installed as part of this scope. The as-supplied length of the S3-ST-016-H-802 strut (20" center to center) had to be shortened in order for the strut to fit in its designated field location. The as-supplied length was shortened about 7" by cutting an existing factory weld, shortening the extension piece and re-welding the items back together. The end brackets of each sway strut were attached to structural steel by an "NF" weld during installation.

Notes:
a) Vessel construction code edition (1998 Edition, 2000 Addenda) was used for the vessel/elbow weld. The welding NDE methodology and acceptance criteria for all welds was NC-5000, 1995 Edition, 1996 Addenda per Relief Request ISI-3-14.
b) Strut assemblies were not serialized. Refer to ILN package for itemization of material heat numbers used for fabrication.

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

No VT-3 exam was required for this scope (IWF-1230) Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/5/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/25/10 to 01/05/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/05/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/18/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: *3-C0P-003-3051-200, 3-C0P-3051-119, R1

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

WO: *800476246, 800468480
WP&IR: *25221-003-C0P-3051-00200, 25221-003-C0P-3051-00119-000

4. **Identification of System:** 2101, Containment
NECP 800072669, ASCs D0033431, D0036294, D0039615, D0039871, D0040164, D0042675
Dwgs: 23000, 23001, SO23-617-3A-D32, D33, D35 & D142
Replacement Item Specs: SO23-617-3A-M25, M26, M28, M30 & M143

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

5. (a) **Applicable Construction Code:** None; Containment Building was designed per Bechtel Topical Report BC-TOP-5, Revision 1, December 1972 (ref UFSAR 3.8.1). Post Tension System was constructed per specification SO23-204-03.
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** Subsection IWL, 2001 Edition, 2003 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped
Containment Bldg.	Bechtel Power Corp.	N/A	N/A	S32101CS001	1983	(see block 7)	no
Post-Tensioning System	VSL	----	N/A	S3.STRC.S22101TNDNS 1/21/11 3 RLH 1/21/11	1983	(see block 7)	no
Tendon, ½" diam, seven wire strand	Sumiden/SDI	see supp sheet	N/A	A416-06 grade 270	---	installed	no
Wedges	Enerpac/SDI	see supp sheet	N/A	AISI 86L20	---	installed	no
Shims, 1" & 2"	Nowell Steel/SDI	see supp sheet	N/A	SA-537 Class 1	---	installed	no
Provisional Shims (0.063")	Nowell Steel/SDI	see supp sheet	N/A	A-607 Grade 50	---	installed	no
Anchor Heads	Enerpac/SDI	see supp sheet	N/A	EN10025-1993 gr S355J2G3	---	installed	no

7. **Description of Work:** A temporary construction opening approximately 27' wide X 28' high was cut in the containment building to provide an opening for removing the original steam generators and installing new replacement steam generators. This work scope includes a portion of the Post-Tensioning System hardware which was removed and replaced in conjunction with the construction opening work. This scope is limited to the vertical tendons in the construction opening work scope (horizontal tendon scope is documented separately). The old vertical tendon/hardware was removed in the construction opening area before the hole was cut. The new tendons were prefabricated (cut to length) on WP&IR*25221-003-C0P-3051-00200. The new strand along with new anchor heads, wedges and shims were then installed at each location on WP&IR 25221-003-C0P-3051-00119, after the opening was restored. The tendon locations in this scope and the replacement material data is listed on the attached supplemental sheet. The following procedures were used in conjunction with this work scope: SO23-617-3A-M54 (Tendon and Grease Removal), SO23-617-3A-M10 (Tendon Sheath Inspection), SO23-617-3A-M11 (Tendon Installation) and SO23-617-3A-M282 (Tendon Stressing).

NOTE: Change notice (WCN) was issued against WP&IR 25221-003-C0P-3051-00001: 25221-003-C0N-3051-00119

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

No pressure testing is required for this scope **Pressure:** N/A psi **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/19/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 06/10/10 to 01/21/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/21/11

SUPPLEMENTAL SHEET

The following (36) vertical tendons were included in this scope:

61-1, 60-2, 59-3, 48-104, 49-103, 50-102, 51-101, 52-100, 53-99, 62-180, 63-179, 64-178, 65-177, 66-176, 67-175, 68-174, 69-173, 70-172, 71-171, 72-170, 73-169, 74-168, 75-167, 76-166, 77-165, 78-164, 79-163, 80-162, 81-161, 82-160, 83-159, 84-158, 85-157, 86-156, 87-155 and 88-154.

Replacement Tendon Strand Material Documentation:

SO23-617-3A-M273 and SO23-617-3A-M315. The tendon material heat numbers and pack numbers installed at each location (too numerous to list) are documented in the WP&IR, Attachment 10, Exhibit 4. Material reconciliation SO23-617-3A-M103 applies.

Replacement Anchor Head Material Documentation:

SO23-617-3A-M319. Heat number 754261, 72 each. Material reconciliation SO23-617-3A-M107, Rev 2 applies.

Replacement Wedge Material Documentation:

SO23-617-3A-M166, M167, M169, M262 & M263, heat number NW4294H; SO23-617-3A-M168 & M261, heat number 5070169;
SO23-617-3A-M340, heat number 5095412 were installed.

Replacement Shim Material Documentation:

1" thick shims: SO23-617-3A-M211, heat numbers W8D622-B20 and E8D142-B24 were installed.

2" thick shims: SO23-617-3A-M82, M111, M211 & M309, heat numbers W8F630-B31, W8625-B65, W8F630-B32, E8C145-B20, E8C145-B21 and E8C145-B19 were installed.

0.063" thick (provisional) shims: SO23-617-3A-M164, heat number G03994 was installed.

RZ Holmes 1/19/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/20/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-COP-3051-121, R1

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

WO: 800468483

WP&IR: 25221-003-COP-3051-00121-000

4. Identification of System: 2101, Containment
NECP 800072669, ASCs D0033431, D0036294, D0039615, D0039871, D0040164, D0042675
Dwgs: 23000, 23001, SO23-617-3A-D32, D33, D35 & D142
Replacement Item Specs: SO23-617-3A-M25, M26, M28, M30 & M143

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

5. (a) Applicable Construction Code: None; Containment Building was designed per Bechtel Topical Report BC-TOP-5, Revision 1, December 1972 (ref UFSAR 3.8.1). Post Tension System was constructed per specification SO23-204-03.

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: Subsection IWL, 2001 Edition, 2003 Addenda

6. Identification of Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped
Containment Bldg.	Bechtel Power Corp.	N/A	N/A	S32101CS001	1983	(see block 7)	no
Post-Tensioning System	VSL	----	N/A	S3.STRC.S32101TNDNS	1983	(see block 7)	no
Tendon, ½" diam, seven wire strand	Sumiden/SDI	see supp sheet	N/A	A416-06 grade 270	---	installed	no
Wedges	Enerpac/SDI	see supp sheet	N/A	AISI 86L20	---	installed	no
Shims, 2"	Nowell Steel/SDI	see supp sheet	N/A	SA-537 Class 1	---	installed	no
Anchor Heads	Enerpac/SDI	see supp sheet	N/A	EN10025-1993 gr S355J2G3	---	installed	no

7. Description of Work: A temporary construction opening approximately 27' wide X 28' high was cut in the containment building to provide an opening for removing the original steam generators and installing new replacement steam generators. This work scope includes a portion of the Post-Tensioning System hardware which was removed and replaced in conjunction with the construction opening work. This scope is limited to the horizontal tendons between buttresses #1A and #3B in the construction opening work scope. Additional horizontal tendon and vertical tendon scope are documented separately. The old horizontal tendon/hardware was removed in the construction opening area before the hole was cut. The new strand along with new anchor heads, wedges and shims were installed after the opening was restored. The tendon locations in this scope and the replacement material data is listed on the attached supplemental sheet. The following procedures were used in conjunction with this work scope: SO23-617-3A-M54 (Tendon and Grease Removal), SO23-617-3A-M10 (Tendon Sheath Inspection), SO23-617-3A-M11 (Tendon Installation) and SO23-617-3A-M282 (Tendon Stressing).

NOTE: Change notices (WCN) were issued against the WP&IR: 25221-003-C0N-3051-00121, 25221-003-C0N-3051-100121 and 25221-003-C0N-3051-200121

8. Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:___ Exempt:___ Other:___
No pressure testing is required for this scope Pressure:___N/A___psi Test Temp:___N/A___°F

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

9. Remarks: None.

(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: Roger D Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/20/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 06/09/10 to 01/24/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/24/11

SUPPLEMENTAL SHEET

The following (23) horizontal tendons were included in this scope:

14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77 and 80.

Replacement Tendon Strand Material Documentation:

SO23-617-3A-M119, SO23-617-3A-M273 and SO23-617-3A-M315. The tendon material heat numbers and pack numbers installed at each location (too numerous to list) are documented in the WP&JR, Attachment 10, Exhibit 4. Material reconciliation SO23-617-3A-M103 applies.

Replacement Anchor Head Material Documentation:

SO23-617-3A-M319. Heat number 754261, 45 each. And SO23-617-3A-M266, 1 each. Material reconciliation SO23-617-3A-M107, Rev 2 applies.

Replacement Wedge Material Documentation:

SO23-617-3A-M109, M166, M167, M169, M262 & M263, heat number NW4294H; SO23-617-3A-M168 & M261, heat number 5070169; SO23-617-3A-M340, heat number 5095412 were installed.

Replacement Shim Material Documentation:

2" thick shims: SO23-617-3A-M82, M111, M211 & M309, heat numbers W8F630-B31, W8625-B65, W8F630-B32, E8C145-B20, E8C145-B21 and E8C145-B19 were installed.

RL Holmes 1/20/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 2101, Containment
NECP 800072669, ASCs D0033431, D0036294, D0039615, D0039871, D0040164, D0042675
Dwgs: 23000, 23001, SO23-617-3A-D32, D33, D35 & D142
Replacement Item Specs: SO23-617-3A-M25, M26, M28, M30 & M143

Date: 1/20/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 3-C0P-3051-123, R1

WO: 800468484

WP&IR: 25221-003-C0P-3051-00123-000

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

5. (a) **Applicable Construction Code:** None; Containment Building was designed per Bechtel Topical Report BC-TOP-5, Revision 1, December 1972 (ref UFSAR 3.8.1). Post Tension System was constructed per specification SO23-204-03.

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** Subsection IWL, 2001 Edition, 2003 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped
Containment Bldg.	Bechtel Power Corp.	N/A	N/A	S32101CS001	1983	(see block 7)	no
Post-Tensioning System	VSL	----	N/A	S3.STRC.S32101TNDNS	1983	(see block 7)	no
Tendon, ½" diam, seven wire strand	Sumiden/SDI	see supp sheet	N/A	A416-06 grade 270	---	installed	no
Wedges	Enerpac/SDI	see supp sheet	N/A	AISI 86L20	---	installed	no
Shims, 2"	Nowell Steel/SDI	see supp sheet	N/A	SA-537 Class 1	---	installed	no
Anchor Heads	Enerpac/SDI	see supp sheet	N/A	EN10025-1993 gr S355J2G3	---	installed	no

7. **Description of Work:** A temporary construction opening approximately 27' wide X 28' high was cut in the containment building to provide an opening for removing the original steam generators and installing new replacement steam generators. This work scope includes a portion of the Post-Tensioning System hardware which was removed and replaced in conjunction with the construction opening work. This scope is limited to the horizontal tendons between buttresses #2B and #3A in the construction opening work scope. Additional horizontal tendon and vertical tendon scope are documented separately. The old horizontal tendon/hardware was removed in the construction opening area before the hole was cut. The new strand along with new anchor heads, wedges and shims were installed after the opening was restored. The tendon locations in this scope and the replacement material data is listed on the attached supplemental sheet. The following procedures were used in conjunction with this work scope: SO23-617-3A-M54 (Tendon and Grease Removal), SO23-617-3A-M10 (Tendon Sheath Inspection), SO23-617-3A-M11 (Tendon Installation) and SO23-617-3A-M282 (Tendon Stressing).

NOTE: Change notices (WCN) were issued against the WP&IR: 25221-003-C0N-3051-00123, 25221-003-C0N-3051-100123, 25221-003-C0N-3051-200123, 25221-003-C0N-3051-300123 and 25221-003-C0N-3051-400123

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___
No pressure testing is required for this scope **Pressure:** N/A psi **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/24/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 06/10/10 to 01/24/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K B Blake Commissions NB6752 A, B, I, N, NS MN054531
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 01/24/11

SUPPLEMENTAL SHEET

The following (23) horizontal tendons were included in this scope:

15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78 and 81.

Replacement Tendon Strand Material Documentation:

SO23-617-3A-M119, SO23-617-3A-M273 and SO23-617-3A-M315. The tendon material heat numbers and pack numbers installed at each location (too numerous to list) are documented in the WP&IR. Attachment 10, Exhibit 4. Material reconciliation SO23-617-3A-M103 applies.

Replacement Anchor Head Material Documentation:

SO23-617-3A-M319. Heat number 754261, 25 each. SO23-617-3A-M266, Heat number 963458, 12 each. SO23-617-3A-M170, Heat number 855476, 9 each. Material reconciliation SO23-617-3A-M107, Rev 2 applies.

Replacement Wedge Material Documentation:

SO23-617-3A-M166, M167, M169, M262 & M263, heat number NW4294H; SO23-617-3A-M168, heat number 5070169; SO23-617-3A-M340, heat number 5095412 were installed.

Replacement Shim Material Documentation:

2" thick shims: SO23-617-3A-M82, M211 & M309, heat numbers W8F630-B31, W8625-B65, W8F630-B32, E8C145-B20, E8C145-B21 and E8C145-B19 were installed.

RLHolmes 1/24/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 1/1/2011 Sheet 1 of 1

Unit: 3

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

Repair/Replacement Plan: 3-C0P-3052-124

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

WO: 800476247

WP&IR: 25221-003-C0P-3052-00124-000

4. **Identification of System:** 2101, *Containment*

NECP 800072669, ASC's D0033431, D0036294, D00039615, D0039871, D0040164 & D0042675
Drawings: 20000(ECNs A47942), 23027 Sh 2 ECN D0043783, SO23-617-3-D255
Specifications: SO23-617-11 (rebar), SO23-617-12 (cadweld sleeves), SO23-617-13 (Installation/Testing of Cadweld Splices)

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

5. (a) **Applicable Construction Code:** None; Containment Building was designed per Bechtel Topical Report BC-TOP-5, (ref UFSAR 3.8.1). Reinforcing Steel and Cadweld Splices were constructed per specifications SO23-203-1 and SO23-203-2.

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** Subsection IWL, 2001 Edition, 2003 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped
Containment Bldg.	Bechtel Power Corp.	N/A	N/A	S32101CS001	1983	(see block 7)	No
#18 Vertical Cadweld Sleeves, A-519 gr 1026	Erico International	N/A	N/A	Bechtel MRR 00916 Bechtel MRR 03073	---	Installed	No
#18 Horizontal Cadweld Sleeves, A-519 gr1026	Erico International	N/A	N/A	Bechtel MRR 02164 Bechtel MRR 00916 Bechtel MRR 03073	---	Installed	No
#11 Vertical Cadweld Sleeves, A-519 gr 1026	Erico International	N/A	N/A	Bechtel MRR 00916 Bechtel MRR 03073	---	Installed	No
#9 Horizontal Cadweld Sleeves, A-519 gr 1026	Erico International	N/A	N/A	Bechtel MRR 00916 Bechtel MRR 02326 Bechtel MRR 03073	---	Installed	No
#8 Rebar, A615 gr 60 (radial ties)	Dubose National Energy Services, Inc.	Heat No: 2008680 Trace No: 37257	N/A	ILN 10000028147	---	Installed	No

7. **Description of Work:** A temporary construction opening approximately 27' wide X 28' high was cut in the containment building to facilitate removing the original steam generators and installing new replacement ones. This work scope includes the rebar installation work performed to restore the opening. The existing rebar was cut to permit removal and then spliced back to restore the cuts. Thrity-one of the splices were manually welded splices per AWS D1.4-98 and the balance were cadweld splices per specification SO23-617-13.

8. **Tests Conducted:** Hydrostatic:___ Pneumatic:____ Nominal Operating Pressure:___ Exempt:___ Other:___

No pressure testing is required for this scope **Pressure:** N/A psi **Test Temp:** N/A °F

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

9. **Remarks:** None.

(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: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/2/11
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 Minnesota, and employed by HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 05/27/10 to 01/03/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

K S Blake
Inspector's Signature

Commissions NB6752 A, B, I, N, NS MN054531
(National Board, State, Province, and Endorsements)

Date 01/03/11

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: _____ Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ Commissions N813402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/04/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 009-10

WO: 800550897 / 800553023 / 800571506

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NC) 1974 Edition 'S' 1974 Addenda
   NDE methods and acceptance per 1995 Edition 1996 Addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 pipe spool	Bechtel Corp.	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	74	Modified	No
10" Sch. 40 pipe 21'-4"	Jinghang	Heat #YX0810-02	N/A	ILN# 10000026504 SA376 TP304/304L	N/A	Installed	No
10" Sch. 40 elbow 1ea.	Taylor Forge	Heat # MVRK-1	N/A	ILN # 1000026396 SA-403 Gr. WP304	N/A	Installed	No
10" Sch. 40 Flange 1ea.	Tioga Pipe	Heat # GHH	N/A	ILN # 10000026403 SA-182 Gr. WP304	N/A	Installed	No
7/8" Studs 36" Length	Mackson Inc.	Heat # 470650	N/A	ILN # 10000010325 SA-193 Gr. B7	N/A	Installed	No
7/8" Nuts 24 ea.	Cardinal	Heat # 301372	N/A	RSO # 3131-92 SA-194 Gr. 2H	N/A	Installed	No

7. **Description of Work:** The replacement of the ECCS stainless steel piping on line number S3-1219-ML-107 in accordance with ECP 800516571. This work scope provided for the installation of schedule 40 piping and to install a low carbon grade of stainless steel for corrosion and design improvement. The piping components were pre-fabricated under NMO # 800550897 and Weld Record WR3-10-063 and installed under NMO # 8005503023. All NDE examinations were performed on all welds in accordance with the weld record.
   References: RRP 009-10, NECP 800516572

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

   See:_____ **Pressure:**_____175_____**psi** **Test Temp:**_____N/A_____**°F**

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

FORM NIS-2 (back)

9. **Remarks:** RoR-014-03 reconciles the replacement 6" pipe which was certified to 1998 Edition, 2000 addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and 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: for Al Meichler Supervising ASME Code Engineer Date: 5/4/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/6/10 to 1/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1219, Fuel Pool Cooling System

Date: 5/03/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800517039-0010

WO: 800517039

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	Nat'l Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" NPS ECCS Piping	Pullman Inc.	S3-FS-057-052	N/A	S31219ML057	1978	Corrected	Yes
(5') 6" NPS sch 40s Pipe	Tioga Pipe Supply Co.	HT# 42262	N/A	ILN-10000026405 SA376-TP304	–	Installed	No

7. **Description of Work:** A portion of the 6" NPS, Sch.10s ECCS gravity feed piping from the refueling storage tank was replaced with schedule 40s per NECP 800542134. The welding and NDE were performed in accordance with weld records WR3-10-016 (EM) and WR3-10-017 (EP). All of the welds were RT examined, methods and acceptance per NC-5111/5320, 1995 Edition, 1996 addenda.

References: S3-1219-ML-057, Sht. 5 (ECN D0036057) for specific weld locations.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**_X_ **Exempt:**___ **Other:**___

Pressure: RWST Level 94% **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

WAZCMg Commissions NB 13402 A, N, I CA2093
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/05/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 010-10, Rev 1

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

WO: 800550894, 800516800

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-080, Sht 3 (ECN D0043214)

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1204-ML-080	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 42262	N/A	ILN 10000026405 SA-376-TP304 (note 1)	—	Installed	No
6" Sch 40S Pipe	Consolidated Pipe & Supply	Ht # 045651	N/A	ILN 10000019514 SA-376-TP304 (note 1)	—	Installed	No
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 3F706	N/A	ILN 10000027815 SA-376-TP304 (note 1)	—	Installed	No
10"x6" BW Eccen. Reducer, Sch 40S	Tioga Pipe Supply Co.	Ht # MVRK-1	N/A	ILN 10000027176 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Tioga Pipe Supply Co.	Ht # MWHD-2 Ht # MWHD-3	N/A	ILN 10000026395 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Tioga Pipe Supply Co.	Ht # MWNG-2	N/A	ILN 10000027811 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Consolidated Pipe & Supply	Ht # MQOW-2	N/A	ILN 10000019420 SA-403-WP304 (note 2)	—	Installed	No

7. **Description of Work:**
The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-080, sht 3 was replaced with schedule 40S per NECP Order 000800516751. Replacement materials had Carbon content restricted to 0.03% max.

Note 1: Reference RoR 014-03
Note 2: Reference RoR-020-03

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___
See: NMO 800516800, Operation 0270 **Pressure:** 173 psig **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger Y Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NB 13402 A, N, I CA2093
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/05/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 010-10, Rev 1

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

WO: 800550894, 800516739 (note 1)
800611068 (note 2)

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-080, Sht 2 (ECN D0043212)

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1204-ML-080	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 42262	N/A	ILN 10000026405 SA-376-TP304 (note 3)	—	Installed	No
6" Sch 40S, 90° elbows (2 each)	Tioga Pipe Supply Co.	Ht # MWHD-2	N/A	ILN 10000026395 SA-403-WP304 (note 4)	—	Installed	No

7. **Description of Work:**
The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-080, sht 2 was replaced with schedule 40S per NECP Order 000800516751. Carbon content of replacement materials was restricted to 0.03% max.

Note 1: Scope includes material verification and pre-fabrication of pipe spools. Performed by Edison Construction Group.
Note 2: Scope includes piping installation field welds. Performed by contractor (WSI). See WSI Traveler 205913-TR-325-04 & WSI NCR 10-266.
Note 3: Reference RoR 014-03
Note 4: Reference RoR-020-03

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

See: NMO 800516739, Operation 0375 **Pressure:** 173 psig **Test Temp:** N/A °F

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FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NB 13402 A, N, I CA2093
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/04/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 010-10, Rev 1

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

WO: 800550894, 800516738 (note 1)
800611068 (note 2)

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-080, Sht 1 (ECN D0043211)

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Stamped Yes/No
S3-1204-ML-080	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 42262	N/A	ILN 10000026405 SA-376-TP304 (note 3)	—	Installed	No
6" Sch 40S Pipe	Consolidated Pipe & Supply	Ht # 045651	N/A	ILN 10000019514 SA-376-TP304 (note 3)	—	Installed	No
6" Sch 40S, 90° elbows (10 each)	Tioga Pipe Supply Co.	Ht # MWHD-2 (6) Ht # MWHD-3 (4)	N/A	ILN 10000026395 SA-403-WP304 (note 4)	—	Installed	No
6" Sch 40S, BW, 45° elbows (2 each)	Tioga Pipe Supply Co.	Ht # MWHD-1 Ht # MWHD-2	N/A	ILN 10000026399 SA-403-WP304 (note 4)	—	Installed	No
6" Sch 40S, BW, 45° elbows (2 each)	Tioga Pipe Supply Co.	Ht # MWHD-1 Ht # MWHD-2	N/A	ILN 10000026399 SA-403-WP304 (note 4)	—	Installed	No
6" Sch 40S, BW, Tees (2 each)	Tioga Pipe Supply Co.	Ht # MWNG-3 Ht # MWNG-3	N/A	ILN 10000027171 ILN 10000027173 SA-403-WP304 (note 4)	—	Installed	No
6" Sch 40S, BW, Reducing Tee	Tioga Pipe Supply Co.	Ht # MMLQ-2	N/A	ILN 10000026400 SA-403-WP304 (note 4)	—	Installed	No
6"x4", Sch 40S, BW, Reducer	Tioga Pipe Supply Co.	Ht # MMLQ-1	N/A	ILN 10000026401 SA-403-WP304 (note 4)	—	Installed	No

7. **Description of Work:**

The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-080, sht 1 was replaced with schedule 40S per NECP Order 000800516751. Carbon content of replacement materials was restricted to 0.03% max.

Note 1: Scope includes material verification and pre-fabrication of pipe spools. Performed by Edison Construction Group.
Note 2: Scope includes piping installation field welds. Performed by contractor (WSI). See WSI Traveler 205913-TR-325-04 & WSI NCR 10-265

Note 3: Reference RoR 014-03
Note 4: Reference RoR-020-03

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

See: NMO 800516738, Operation 0340 **Pressure:** 173 psig **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 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: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB 13402 A, N, I CA2093
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/05/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 013-10

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

WO: 800550894, 800516738

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-180, Sht 1 (ECN D0033613, PIC D00415741)

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1204-ML-180	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
2-1/2" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 504054	N/A	ILN 10000026407 SA-376-TP304 (note 1)	—	Installed	No
2-1/2" Sch 40S, BW, 90° elbow	Tioga Pipe Supply Co.	Ht # MTLU-1	N/A	ILN 10000023711 SA-403-WP304 (note 2)	—	Installed	No
2-1/2" 300# WNRF Flange, Sch 40S	Energy & Process Corp.	Ht # 3750ANE	N/A	ILN 10000030151 SA-182 F304 (note 3)	—	Installed	No

7. **Description of Work:**
The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-180, sht 1 was replaced with schedule 40S per NECP Order 000800516751. Replacement materials had Carbon content restricted to 0.03% max.

Note 1: Reference RoR 014-03
Note 2: Reference RoR-020-03
Note 3: Reference RoR-011-03

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___
See: NMO 800516738, Operation 0340 **Pressure:** 173 psig **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** RoR-002-03 reconciles the replacement stud material which is certified to ASME III, Class 2, 1971 Edition, no add. and 1989 Edition respectively.

(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: [signature] for Al Meichler Supervising ASME Code Engineer Date: 12/15/10
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 5/3/10 to 10/11/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/18/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10/18/2010

Unit: C

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

Repair/Replacement Plan: GEN-266

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

WO: 800494646

4. **Identification of System:** Main Steam System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
(15) 1-3/8"-8UN(3A) x 36" long all-thread material	NOVA Machine Products Inc.	Heat # 72814, Heat Code "4S38"	N/A	ILN# 10000027369 SA193 gr. B7	N/A	-------	No
(12) 1-3/8"-8UN(3A) x 36" long all-thread material	Mackson Inc.	Heat #11503850, Heat Code "AQG"	N/A	RSO-0521-05-00 SA193 gr. B7	N/A	-------	No

7. **Description of Work:**

(80) spare replacement inlet studs for the main steam safety valves were fabricated in accordance with the requirements of RRP-GEN-266 Rev.0. This fabrication process involved cutting the (27) pieces of 36" long all-thread (heat #s 72814 and 11503850) to stud lengths of approximately 9-5/8" and machining per detail 5 of drawing SO23-507-3-17. The finished studs were marked with heat trace code, material grade, material code, and work order number.

8. **Tests Conducted:** None Required

Pressure: N/A psi **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 3/23/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 5-27-10 to 3-25-11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

T.O. Pur
Inspector's Signature

Commissions NB12050 A, N, I CA1969
(National Board, State, Province, and Endorsements)

Date 3-25-11

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

As Required by the Provisions of the ASME Code Section XI

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

   Date: 2/1/2011 **Sheet 1 of 1**

   Unit: 3

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

   Repair/Replacement Plan: 3-C0P-3054-127

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

   WO: 800476249, 800476250, 800511055
   WP&IR: 25221-003-C0P-3054-00127-000, Note 1

4. **Identification of System:** 2101, Containment
   NECP: 800072669, ASC's D0033431, D0036294, D0039615, D0039871, D0040164 & D0042675
   Specifications: SO23-617-10 (concrete), CS-C2 (placement), SO23-617-3-M27 (testing)
   Dwgs: 20000 ECN A47942; 23027 Sh 2 ECN D0043783

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

5. (a) **Applicable Construction Code:** None; Containment Building was designed per Bechtel Topical Report BC-TOP-5, Revision 1, December 1972 (ref UFSAR 3.8.1).
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** Subsection IWL, 2001 Edition, 2003 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped
Containment Bldg	Bechtel Corp.	N/A	N/A	S32101CS001	1982	(see block 7)	No
Concrete, 149 CY	Catalina Pacific	N/A	N/A	See Note 2	N/A	Installed	No
Concrete, 3 CY	Catalina Pacific	N/A	N/A	See Note 3	N/A	Installed	No
Grout	Five Star Products, Inc.	Lot # 1491700540	N/A	ILN 10000022971 See Note 4	N/A	Installed	No

7. **Description of Work:**

A temporary construction opening approximately 26' X 28' in size was cut in the containment building to provide an opening for removing the original steam generators and installing new replacement steam generators. This work scope includes only the replacement concrete portion of the construction opening. Other items (rebar, tendons, liner plate, etc.) are documented on separate NIS-2 forms. Approximately 149 cubic yards of concrete were placed in restoration of the construction opening. Three additional cubic yards and some grout were placed subsequent to the initial pour to repair voids (reference Bechtel NCR 25221-003-G61-GCX-00126). Visual examinations of the repaired concrete area were performed in accordance with ASME XI, IWL-5250 and work order 800511055. The visual examinations were performed prior to pressurization of the Containment Integrated Leak Rate Test (ILRT), while at test pressure and again after depressurization. The ILRT was performed in accordance with ASME XI, IWL-5000 and site procedure SO3-V-3.12. The ILRT was documented on the "Reactor Containment Building Integrated Leakage Rate Test Report" dated January 2011, prepared by ILRT Incorporated (ref. doc. no. ILRT-R-100308).

NOTES:

1. The following change notices (WCN's) were issued against WP&IR 25221-003-C0P-3054-00127: 25221-003-C0N-3054-00127, 25221-003-C0N-3054-10127 & 25221-003-C0N-3054-20127
2. Concrete Test Samples, material placed on 12/16/2010, ILN's 890000008403, 890000008551, 890000008552, 890000008553
3. Concrete Test Samples, material placed on 12/20/2010, ILN 890000008451
4. Grout Testing, material placed on 12/30/2010, ILN 890000008602

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:** X **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

Pressure: 53 **psig** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. Remarks: None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [illegible] for AB Meichler Supervising [illegible] Engineer Date: 3/16/11

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 HSB-CT of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10-28-10 to 12-18-10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB 12050 A, N, I CA1969

Inspector's Signature (National Board, State, Province, and Endorsements)

Date 3-22-11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/17/2010 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 3-C0P-3053-126, Rev 1

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

WO: 800476248, 800601025
WP&IR: 25221-003-C0P-3053-00126-002

4. **Identification of System:** 2101, Containment

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

NECP 800072669, ASC's D0028172, D0033431, D0036294, D0039615, D0040164, D0039871 & D0042675
Dwgs: 23056 Sh 2, ECN D00042249

5. (a) **Applicable Construction Code:** ASME Section III, NE, 1971 Edition, Winter 1972 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** Subsection IWE, 2001 Edition, 2003 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Containment Bldg.	Bechtel Power Corp.	N/A	N/A	S32101CS001	1983	-------	No
Containment Bldg. Liner Plate	Bechtel Power Corp.	N/A	N/A	SA-285 Gr A, 1/4" thk	----	(see block 7)	No

7. **Description of Work:**

A temporary construction opening approximately 27' wide X 28' high was cut in the containment building to provide an opening for removing the original steam generators and installing new replacement steam generators. This work scope includes only the liner plate portion of the construction opening. During restoration of the liner plate opening, the welding and NDE were performed in accordance with the original construction specification (SO23-205-05) and ASME III, Div. 2, 2001 Ed., 2003 Add.. An MT examination was performed on the liner plate seam weld. Vacuum box testing was also performed on the seam weld.. A Containment Integrated Leak Rate Test (ILRT) was performed in accordance with ASME XI, IWE-5221 and site procedure SO3-V-3.12.

Notes: 1. Regarding construction code listed above, the design was per Bechtel Topical Report BC-TOP-1, "Containment Liner Plate Design". The liner plate was erected per specification SO23-205-05 which specified that material and welding be per the Code, Subsection, Edition and Addenda specified in 5(a) above.

ILRT is documented in report ILRT-R-100308, prepared by ILRT Incorporated, dated January 2011.

8. **Tests Conducted:** **Hydrostatic:**____ **Pneumatic:** X **Nominal Operating Pressure:**____ **Exempt:**____ **Other:**____

Pressure: 53 **psi** **Test Temp:** N/A **°F**

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

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1219, Fuel Pool Cooling System

Date: 5/03/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800517039-0010

WO: 800567815

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	Nat'l Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" NPS ECCS Piping	N/A	N/A	N/A	S31219ML057	N/A	--------	No
6" NPS sch 40s Pipe	Tioga Pipe Supply Co.	HT# 42262	N/A	ILN-10000026405 SA-376-TP304	–	--------	No
6" NPS Sch 40s, 45° Elbow (1)	Tioga Pipe Supply Co.	HT# MFWL-1	N/A	ILN-10000023603 SA-403-WP304/304L	–	--------	No
6" NPS Sch 40s, 45° Elbow (1)	Tioga Pipe Supply Co.	HT# MWNG-2 S/N: 2	N/A	ILN-10000027172 SA-403-TP304/304L	–	--------	No
6" NPS Sch. 40S, 90° LR Elbow, BW (1)	Tioga Pipe Supply Co.	HT# MWHD-3 S/N: 2	N/A	ILN-10000026395 SA-403 WP304/304L	–	-------	No

7. **Description of Work:** A portion of the 6" NPS ECCS gravity feed piping from the refueling storage tank were pre-fabricated for subsequent installation during the R3C16 outage. The replacement piping was changed from schedule 10S to schedule 40s per NECP 800542134. The welding and NDE were performed in accordance with weld records WR3-09-129 (PR), WR3-09-130(PS), WR3-10-019 (PK), WR3-10-020 (PL), and WR3-10-021 (PM). All of the welds were RT examined, methods and acceptance per NC-5111/5320, 1995 Edition, 1996 addenda.

References: S3-1219-ML-057, Sht. 3 (ECN D0042068) for specific weld locations.

Notes: 1. RoR-014-03 reconciles the replacement 6" pipe which was certified to 1998 Edition, 2000 addenda.
2. RoR-020-03 reconciles the replacement 6" elbows which were certified to the 1998 Edition, 2000 addenda.

8. **Tests Conducted: N/A, pressure test to be conducted when installed**

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

FORM NIS-2 (back)

9. **Remarks:** None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 5/3/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/29/10 to 12/15/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/5/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 5/05/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev.1

WO: 800579807, 800571506

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" NPS ECCS Piping	SCE	N/A	N/A	S31204ML080	-----	Corrected	No
(2) 1"x 1½" x 2" Lug (S3-SI-080-H-035)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(4) 1" x 1½" x 2" Lug (S3-SI-080-H-036)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(2) 1" x 1½" x 2" Lug (S3-SI-080-H-039)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(4) 1" x 2" x 3" Lug (S3-SI-080-H-041)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
3" Sch.40s Pipe (S3-SI-080-H-050)	Tioga Pipe Supply Co. Inc	Ht.#: D061 S/N: 8738-1	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No

7. **Description of Work:** Installation of integral attachments to the newly installed 6"sch.40s ECCS piping on line S31204ML080 in accordance with NECP 800516572 by SCE Maintenance and Construction Services. The scope of this work order in support located in the aux. feedwater pump building only. The new lugs were cut from random lengths of bar stock material. All new materials are documented in NMO 800571506.

Pipe Support ID	Weld Record	NDE Report #
S3-SI-080-H-035	WR3-10-092	3PT-213-10
S3-SI-080-H-036	WR3-10-093	3PT-211-10
S3-SI-080-H-039	WR3-10-094	3PT-212-10
S3-SI-080-H-041	WR3-10-095	3PT-075-10
S3-SI-080-H-050	WR3-10-096	3PT-090-10

Notes: 1. RoR-013-03 reconciles the lug material which was certified to 1998 Edition, 2000 addenda
2. RoR-014-03 reconciles the pipe material which was certified to 1998 Edition, 2000 addenda

8. **Tests Conducted: None, not required for work scope**

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

FORM NIS-2 (back)

9. **Remarks:** None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: for Al Meichler Supervising ASME Code Engineer Date: 5/6/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/7/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/05/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev.1

WO: 800579808 / 800571506

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 Pipe Spool	Bechtel Corp.	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	78	Modified	No
Pipe Support S3-FS-107-H-001	Dubose National	Heat # 40187	N/A	ILN # 10000022302 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-006	Dubose National	Heat # 40187	N/A	ILN # 10000023302 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-007	Consolidated Pipe	Heat # 045651	N/A	ILN # 100000192461 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-009	Dubose National	Heat # 40187	N/A	ILN # 10000022302 4" NPS, Sch. 40 / SA376 TP304	N/A	nstalled	No

7. **Description of Work:** During the replacement of line number S3-1219-ML-107, it was also required to replace a section of the pipe support dummy stubs. The 4" NPS schedule 40 pipe stubs are welded to the replacement piping, based on the design that are NF. All NDE examinations were performed on all welds in accordance with the weld record.

Weld Record Numbers	Pipe Support Numbers
WR3-10-101	S3-FS-107-H-001
WR3-10-103	S3-FS-107-H-006
WR3-10-104	S3-FS-107-H-007
WR3-10-105	S3-FS-107-H-009

References RRP 014-10
NECP 800516572

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

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: _____ Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/17/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/05/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev. 1

WO: 800579808 / 800571506

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 Pipe Spool	Bechtel	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	78	Modified	No
Pipe Support S3-FS-107-H-005	Dubose National	Heat # 250714	N/A	ILN # 10000028114 1"x2" Lugs / SA240 Gr.304	N/A	Installed	No
Pipe Support S3-FS-107-H-001,006,007,009	N/A	N/A	N/A	S3-1219-ML-107 dummy stub to end plate welds	N/A	Reinstalled	No
Pipe Support S3-FS-107-H-001,006,007,009	N/A	N/A	N/A	S3-1291-ML-107 rear bracket to end plate weld	N/A	Reinstalled	No

7. **Description of Work:** During the replacement of line number S3-1219-ML-107, it was also required to replace the lungs and reinstall the dummy stub to end plates, along with the rear bracket end plates. These are NF designed pipe supports that required material replacement and welding. All NDE examinations were performed on all welds in accordance with the weld record.

Weld Record Numbers	Pipe Support Numbers
WR3-10-102	S3-FS-107-H-005
WR3-10-106	S3-FS-107-H-001, 006, 007, 009
WR3-10-107	S3-FS-107-H-001, 006, 007, 009

Reference: RRP 014-10 Rev. 1
NECP 800516572

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

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

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

9. **Remarks:** None.

(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: _____ Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/17/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

==========

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

Date: 4/13/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 800516868-0010

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

WO: 800583669, 800611066, 800613538

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

4. **Identification of System:** 1204, Safety Injection System

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Line S3-1204-ML-001	Pullman Kellogg	N-4726	N/A	spool 3-SI-001-009	1978	Corrected	Yes
Line S3-1204-ML-001	Pullman Kellogg	N-7284	N/A	spool 3-SI-001-013	1978	Corrected	Yes
24" NPS sch 40S Pipe, 14' - 6" long	Energy & Process Corp.	HT# 483832	N/A	ILN-100000118205 SA312 TP304/304L	–	Installed	No
24" NPS sch 40S, 90° Elbow, BW	Energy & Process Corp.	S/N: 9402-1-1 Ht# 304L-WOIW001	N/A	ILN-10000021362 SA403 TP304/304L	2010	Installed	Yes
2" NPS 3000# SW Pipet	Dubose National Energy Serv., Inc.	Ht# 4822ANA Ht.# 245637	N/A	ILN-10000022154 SA182 F304/304L	–	Installed	No
2-3/8" round , 2" long solid plug	Dubose National Energy Serv., Inc.	HT# 57842	N/A	ILN-10000026751 SA479 Tv 304/304L	–	Installed	No
(3) Lug, 2" x 8⅞ x 8⅞"	Dubose National Energy Serv., Inc.	HT#: 5849022 Trace #: 37819	N/A	ILN-10000029035 SA240 gr. 304/304L	–	Installed	No
(4) Lug, 3" x 8⅞ x 8⅞"	Dubose National Energy Serv., Inc.	HT#: 5849085 Trace #: 37820	N/A	ILN-10000029036 SA240 gr. 304/304L	–	Installed	No

7. **Description of Work:** An approx. 20' length of 24" sch. 10s pipe was replaced with schedule 40s pipe in accordance with NECP 800500099 to correct a through-wall leak on line S3-1204-ML-001. Fabrication of the pipe spool was performed by SCE Maintenance and Construction Services and the installation of the pipe spool was performed by Welding Services Inc. (WSI) was contracted to perform the piping installation in accordance with WSI's QA and welding programs and SCE's ASME Section XI Program. The Section XI replacement activities were performed by SCE under NMO 800583669 and WSI per Travelers 205913-TR-001, 205913-TR-325 (piping), and 205913-TR-326 (NF supports). A 2" branch connection was installed on the replacement pipe section to facilitate application of the argon gas purge for the girth welds. The 24" girth welds were RT examined. The branch connection, socket weld, and pipe lug attachment welds were all PT examined. See supplemental page 2 for additional details.

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: RWST Level 95% **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** The 24" pipe was certified to the 1980 Edition, S.'80 add. as allowed per RoR-001-09, The pipet and pipe plug were certified to the 1998 Edition, 2000 addenda as allowed per RoR-011-03 and RoR-024-03 respectively.

(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: For Al Meichler Supervising ASME Code Engineer Date: 5/2/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/6/10 to 1/6/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/3/11

Ref. Isometric Drawing S3-1204-ML-001 Sht. 1 and ECN D0035908 & PIC D0041664

WELD ID / TYPE	RWO & Work Order #	NDE Reports	PSE (N/A if not req'd.)
MG / 24" B.W.	Welding Services Inc. 800611066	3RT-392-10 3RT-409-10 3RT-414-10	N/A
MH / 24" B.W.	Welding Services Inc. 800611066	3RT-410-10 3RT-415-10	N/A
MJ / 24" BW (WR3-10-114)	SCE Maintenance & Constructions Services	3RT-306-10	PDI-UT Exam. PT Exam.
MK / 2" Branch (WR3-10-116)	SCE Maintenance & Constructions Services	3PT-208-10	N/A
ML / 24" B.W.	Welding Services Inc. 800611066	3RT-413-10 3RT-416-10	N/A
SD / 2" S.W.	Welding Services Inc. 800611066	205913-PT-SD-1	N/A

Ref. Pipe Support Drawing S3-SI-001-H-030 with ECN D0042607

WELD ID	RWO & Work Order #	NDE Reports	PSE (N/A if not req'd.)
LUG WELD SG	Welding Services Inc. 800613538	205913-PT-H030-1	N/A
LUG WELD SH	Welding Services Inc. 800613538	205913-PT-H030-1	N/A
LUG WELD SJ	Welding Services Inc. 800613538	205913-PT-H030-1	N/A

Ref. Pipe Support Drawing S3-SI-001-H-031 with ECN D0042608

WELD ID	RWO & Work Order #	NDE Reports	PSE (N/A if not req'd.)
LUG WELD SG	Welding Services Inc. 800613538	205913-PT-H031-1	N/A
LUG WELD SH	Welding Services Inc. 800613538	205913-PT-H031-1	N/A
LUG WELD SJ	Welding Services Inc. 800613538	205913-PT-H031-1	N/A
LUG WELD SK	Welding Services Inc. 800613538	205913-PT-H031-1	N/A

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Chemical & Volume Control System

Date: 04/25/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800591784-0017

WO: 800591784

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1971 Edition, S. '73 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Globe Valve	Kerotest	MC8-20	N/A	S31208MU070	1976	Corrected	Yes
Bonnet	Flowserve Corp.	Heat#: 72240 S/N: 235	N/A	RSO-0784-07 SA479 type 316	N/A	Installed	No
Disc	Flowserve Corp.	S/N:ZFO-14	N/A	RSO-2343-04 SA479 type 316	2004	Installed	Yes

7. **Description of Work:**

The 2" globe was overhauled to correct seat leakage. A new bonnet and disc were installed in conjunction with the overhaul.

A system leakage test and VT-2 examination was performed when valve was returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 2250 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The replacement bonnet and disc were both certified to ASME, Class 1.

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/25/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/29/10 to 2/12/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/29/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/18/11 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: 800592040-0010

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

WO: 800592040

4. **Identification of System:** Safety Injection System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1971 Edition, S. '73 addenda (Valve)
   ASME Section III, Class 2, 1974 Edition, S. '74 addenda (Piping)
   ASME Section III, NC-5000, 1995 Edition, 1996 addenda (NDE)

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1500# Globe Valve	Kerotest	CAQ12-2	N/A	S31204MU068	1980	Removed	Yes
2" 1500# Globe Valve	Flowserve Corp.	16BMA	N/A	ILN-10000005086	2008	Installed	Yes
(7") 2" Sch.160 Pipe	Dubose National Energy Supp.	Heat # 40095 Trace # 33763	N/A	ILN-10000007912 SA376 tp.316	N/A	Installed	No

7. **Description of Work:** The globe valve in plant FLOC S3.ECCS.S31204MU068 was replaced in accordance with NECP 800597064 due to excessive seat leakage. The valve replacement was performed in accordance with weld records WR3-10-143, WR3-10-144, and WR3-10-145. All welds were radiographically examined per the weld records.

A VT-2 Examination and System Leakage Test was performed at NOP.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 1457 **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The pipe was certified to the 1998 Edition, 2000 addenda as allowed per RoR-014-03

(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: [signature] for Al Meichler Supervising ASME Code Engineer Date: 2/17/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/30/10 to 2/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/27/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Safety Injection System

Date: 2/25/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800602362-0010

WO: 800602362

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1971 Edition, Summer 1973 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
1" 2500# Control Valve	Haml-Dahl	74/5798/007	N/A	3HV9371	1977	Corrected	Yes
Valve Plug	Flowserve Corp.	S/N: 1 Heat # 716445	N/A	RSO-0130-00 SA479-316 w/Stell.#6 HF	2000	Installed	Yes

7. **Description of Work:** The valve plug in control valve 3HV9371 was replaced in-kind during overhaul of valve to correct seat leakage. A System Leakage Test and VT-2 examination was performed when returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 2250 **psi** **Test Temp:** >280 **°F**

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

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [illegible] for Al Meichler Supervising ASME Code Engineer Date: 2/25/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/8/10 to 2/13/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/18/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/12/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: GEN-250 Rev.1

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

WO: 800608665

4. **Identification of System:** Main Steam System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition. S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected. Removed. or Installed	ASME Code Stamped Yes/No
Size 100-6 Snubber	Pacific Scientific	469	N/A	S3ST001H008	1978	Removed	No
Size 100-6 Snubber	Basic-PSA Inc.	44278	N/A	ILN-10000018259	2009	Installed	No

7. **Description of Work:** The mechanical snubber in plant functional location S3.SBCS.S3ST001H008 was replaced in-kind as a corrective maintenance action. A VT-3 examination was performed after installation of the replacement snubber.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A psi **Test Temp:** N/A °F

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** The replacement snubber was certified to ASME III, Class 1(NF), 1998 Edition, 2000 addenda.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed: [signature] for Al Meichler Supervising ASME Code Engineer Date: 1/17/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/17/10 to 12/16/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/18/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 01/12/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-250 Rev.1

WO: 800610409

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10K - 6" Snubber	Pacific Scientific	17976	N/A	S3FW189H012	1991	Removed	No
10K - 6" Snubber	Pacific Scientific	17987	N/A	RSO-0806-92	1992	Installed	No

7. **Description of Work:** The mechanical snubber in plant functional location S3.SBCS.S3FW189H012 was replaced in-kind as a corrective maintenance action. A VT-3 examination was performed after installation of the replacement snubber.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA

FORM NIS-2 (back)

9. **Remarks:** The replacement snubber was certified to ASME III, Class 1(NF).

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/17/10 to 12/23/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/19/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 5/04/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800517039-0010

WO: 800611067, 800613539

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" NPS ECCS Piping	Pullman Inc.	N-4135	N/A	spool 3-FS-057-030	1977	Corrected	Yes
6" NPS ECCS Piping	Trent Tube	Heat # 622501	N/A	spool 3-FS-057-035	----	Removed	No
6" NPS ECCS Piping	Pullman Inc.	N-3048	N/A	spool 3-FS-057-036	1977	Corrected	Yes
6" NPS ECCS Piping	Pullman Inc.	N-9115	N/A	spool 3-FS-057-058	1978	Removed	Yes
6" NPS ECCS Piping	Pullman Inc.	N-8749	N/A	spool 3-FS-057-059	1978	Removed	Yes
6" NPS sch 40S Pipe	Tioga Pipe Supply Co.	HT# 42262	N/A	ILN-10000026405 SA-376-TP304	–	Installed	No
(4) 3" x 1" x 3/4" Pipe Lugs	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No

7. **Description of Work:** An approx. 50' section of 6" sch. 10s piping was replaced with schedule 40s pipe and fittings due to through wall boric acid leakage on line S3-1219-ML-057 in accordance with NECP 800542134. The piping was pre-fabricated under NMO 800567815 by SCE Maintenance and Construction Services. Welding Services Inc. (WSI) was contracted to perform the installation of the pre-fabricated piping sub-assemblies in accordance with WSI's QA and welding programs, and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 205913-TR-001, 205913-TR-325, and 205913-TR-326. The welding and NDE were performed per WSI Weld Data Sheets PH, PN, PP, PQ, PU, PV for piping installation and S3-FS-057-H-022 Lugs for the (4) lug attachment welds.

Reference: Iso. drawing S3-1219-ML-0057, Sh 3 with ECN D0042068
NDE Reports: Weld PH; 3RT-394-10
Weld PN; 3RT-367-10, Weld PN-R1-3RT-401-10
Weld PP; 3RT-368-10
Weld PQ; 3RT-369-10
Weld PU; 3RT-393-10
Weld PV; 3RT-373-10, Weld PV-R1-3RT-400-10, Weld PV-R2-3RT-411-10
Welds SA, SB, SC, & SD; 205913-PT-H022-1

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: RWST Level 94% **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** RoR-014-03 reconciles the replacement 6" pipe which was certified to 1998 Edition, 2000 addenda

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and 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: for Al Meichler Supervising ASME Code Engineer Date: 5/4/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/20/10 to 1/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/5/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** 1204, Safety Injection System

Date: 5/04/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev.1

WO: 800611069

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

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

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
6" NPS ECCS Piping	SCE	N/A	N/A	S31204ML080	-----	Corrected	No
(4) 1" x 2" x 4" Lug (S3-SI-080-H-002)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(2) 1" x 2" x 4" Lug (S3-SI-080-H-007)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(4) 1" x 2" x 4" Lug (S3-SI-080-H-009)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No
(2) 1" x 1½" x 3" Lug (S3-SI-080-H-010)	Dubose National Energy	Ht.#: 250832 Trace Code:37753	N/A	ILN-10000028115 SA240 Ty. 304/304L	–	Installed	No
(4) 1" x 2" x 4" Lug (S3-SI-080-H-015)	Dubose National Energy	Ht.#: 250714 Trace Code:37750	N/A	ILN-10000028114 SA240 Ty. 304/304L	–	Installed	No

7. **Description of Work:** Installation of integral attachments to the newly installed 6"sch.40s ECCS piping on line S31204ML080 in accordance with NECP 800516572 by Welding Services Inc. (WSI). WSI was contracted to perform the installation of the integral attachments for the pipe supports listed below. All work was performed WSI's QA and welding programs and SCE's ASME Section XI Program. The Section XI replacement activities were performed per WSI Travelers 205913-TR-001 and 205913-TR-326. The welding and NDE were performed per WSI Weld Data Sheets listed below. The new lugs were cut from 12' lengths of bar stock material.

Weld Data Sheet	Weld Ids	NDE Report #
S3-SI-080-H-002 Lugs	SC-A, SC-B, SD-A, SD-B	205913-PT-H002-1
S3-SI-080-H-002 Structural	A & B	N/R
S3-SI-080-H-007 Lugs	SC-A, SC-B, SD-A, SD-B	205913-PT-H007-1
S3-SI-080-H-009 Lugs	SE-A, SE-B, SF-A, SF-B SG-A, SG-B, SH-A, SH-B	205913-PT-H009-1
S3-SI-080-H-010 Lugs	SE-A, SE-B, SF-A, SF-B	205913-PT-H010-1
S3-SI-080-H-015 Lugs	SE-A, SE-B, SF-A, SF-B SG-A, SG-B, SH-A, SH-B	205913-PT-H015-1

8. **Tests Conducted:** None, not required for work scope

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

FORM NIS-2 (back)

9. Remarks: RoR-013-03 reconciles the lug material which was certified to 1998 Edition, 2000 addenda

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and 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: for Al Meichler Supervising ASME Code Engineer Date: 5/5/2011
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 HSB-CT of Hartford, CT have inspected the components described in this Owner's Report during the period 10/6/10 to 12/22/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 01/18/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-252 Rev.0

WO: 800612785

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10K - 6" Snubber	Pacific Scientific	2835	N/A	S3FW190H011T	1977	Corrected	No
Load Pin (1)	Basic PSA Inc	Ht. # A18592-3 Ht. Cd.: N4308	N/A	ILN-10000027095 SA564 Gr.630, H-1150	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3FW190H011T that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly..

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1(NF), 1998 Edition, 2000 addenda as allowed per RoR-026-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/27/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 01/18/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-252 Rev.0

WO: 800612787

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

5. (a) **Applicable Construction Code:** ASME Section III. Class 2-NF, 1974 Edition. S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10K - 6" Snubber	Pacific Scientific	4345	N/A	S3FW190H014B	1978	Corrected	No
Load Pin (1)	Basic PSA Inc	Ht. # A18592-3 Ht. Cd.: N4308	N/A	1LN-10000027095 SA564 Gr.630. H-1150	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3FW190H014B that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly..

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

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

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1(NF), 1998 Edition, 2000 addenda as allowed per RoR-026-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/27/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 01/18/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-252 Rev.0

WO: 800612788

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
35K - 6" Snubber	Pacific Scientific	3068	N/A	S3FW190H015	1978	Corrected	No
Load Pin (1)	Basic PSA Inc	Ht. # G14516-4 Ht. Cd.: N4529	N/A	ILN-10000019146 SA564 Gr.630, H-1100	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3FW190H015 that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly..

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1(NF), 1998 Edition, 2000 addenda as allowed per RoR-026-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/19/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/18/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: GEN-252 Rev.0

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

WO: 800612789

4. **Identification of System:** Main Steam System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10K - 6" Snubber	Pacific Scientific	11087	N/A	S3FW190H018N	1981	Corrected	No
Load Pin (1)	Basic PSA Inc	Ht. # G7420-7 Ht. Cd.: N4203	N/A	RSO-2167-03 SA564 Gr.630, H-1075	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3FW190H018N that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly..

8. **Tests Conducted:** Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:___ Exempt:___ Other: X

Pressure: N/A psi Test Temp: N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1(NF), 1986 Edition, no addenda as allowed per RoR-026-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/22/11

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/18/2011 **Sheet 1 of 1**

Unit: 3

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

Repair/Replacement Plan: GEN-252 Rev.0

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

WO: 800612790

4. **Identification of System:** Main Steam System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10K - 6" Snubber	Pacific Scientific	11099	N/A	S3FW190H018S	1981	Corrected	No
Load Pin (1)	Basic PSA Inc	Ht. # G7420-7 Ht. Cd.: N4203	N/A	RSO-2167-03 SA564 Gr.630, H-1075	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3FW190H018S that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly..

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

Pressure: N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1(NF), 1986 Edition, no addenda as allowed per RoR-026-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 1/18/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/30/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/22/11

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Main Steam System

Date: 01/12/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: GEN-252 Rev.0

WO: 800613420

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, S. '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Size 100-6 Snubber	Pacific Scientific	520	N/A	S3ST002H001	1978	Corrected	No
Load Pin	Basic-PSA Inc.	Heat # 046664	N/A	ILN-10000017876	N/A	Installed	No

7. **Description of Work:** Replaced a load pin for snubber assembly S3.SBCS.S3ST002H001 that was damaged during removal process. A VT-3 examination was performed of the reinstalled snubber assembly.

8. **Tests Conducted:** Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:___ Exempt:___ Other: X

Pressure: N/A psi **Test Temp:** N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** The replacement load pin was certified to ASME III, Class 1, 1998 Edition, 2000 as allowed per RoR-026-03.

(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: [signature] for Al Meichler Supervising ASME Code Engineer Date: 1/24/2011
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/19/10 to 12/23/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB13402-1 CA2093 California
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 4/27/11

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

As Required by the Provisions of the ASME Code Section XI

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

   Date: 04/12/2011 **Sheet 1 of 1**

   Unit: 3

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

   Repair/Replacement Plan: 800615888-0017, GEN-239 Rev.1

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

   WO: 800615888

4. **Identification of System:** Safety Injection / Shutdown Cooling System

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

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, Summer '74 addenda

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
1½ x 2½"Safety Relief Valve	Crosby Valve & Gage	N61198-00-0004	N/A	3PSV9308	1992	Removed	Yes
1½ x 2½"Safety Relief Valve	Anderson Greenwood Crosby	N61198-00-0006	N/A	ILN-10000029307	2010	Installed	Yes
(4) ¾"-10UN x 4.25" Stud bolt	Mackson Inc.	Heat # 367370	N/A	RSO-0775-06 SA193 gr.B7	N/A	Installed	No
(8) ¾"-10UN Heavy Hex Nut	Mackson Inc.	Heat # 7345831	N/A	ILN-10000019567 SA194 gr.2H	N/A	Installed	No

7. **Description of Work:**

The safety relief valve in plant position 3PSV9308 was replaced per NECP 800516571. The valve replacement was required due to the piping system attached to valve was being replaced and changing from ASME III, Code Class 3 to ASME III, Code Class 2 per referenced NECP. The outlet bolting was replaced with ASME III, Class 2 bolting consistent with the piping classification. The stud bolts were fabricated from all-thread material in accordance with RRP-GEN-239 Rev.1.

A system leakage test and VT-2 examination was performed when returned to service.

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___**

   Pressure: 173 psi @ 3P-015 discharge Test Temp: N/A °F

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

FORM NIS-2 (back)

9. **Remarks:** The replacement stud bolts were certified to the 1989 Edition, no addenda as allowed per reconciliation RoR-002-03. The replacement nuts were certified to the 1989 Edition, no addenda as allowed per reconciliation RoR-003-03.

(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: for Al Meichler Supervising ASME Code Engineer Date: 4/27/2011

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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 12/2/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NB13402-1 CA2093 California

(National Board, State, Province, and Endorsements)

Date 5/3/11

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

DATA REPORT

1. Manufactured By Anderson Greenwood Crosby, 55 Cabot Blvd., Mansfield, MA 02048
Name and Address

Model No. JO-SS-9-WRS-SPL Order No. G438460000 Contract Date 8/6/2010 National Board No. —

2. Manufactured For EDISON MATERIAL SUPPLY LLC Order No. 4500306584
Name and Address

3. Owner EDISON MATERIAL SUPPLY LLC
Name and Address

4. Location of Plant SAN ONOFRE GEN. STA. - SAN CLEMENTE, CA

5. Valve Identification SPARE Serial No. N61198-00-0006 Drawing No. DS-C-61193 REV. D

Type SAFETY RELIEF Orifice Size 0.852 Inch Pipe Size — Inlet 1 1/2 Inch Outlet 2 1/2 Inch
Safety, Safety Relief, Pilot, Power Actuated

6. Set Pressure (PSIG) 615 PSIG WATER 200 °F
Rated Temperature

Stamped Capacity 200 GPM WTR/LIQ. @ 70°F @ 10 % Overpressure — Blowdown (psig) 10%

Hydrostatic Test (PSIG) Inlet 925 Complete Valve 100

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1974 Addenda Date SUMMER 1974 Case No. N/A

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	N92048-36-0007	ASME SA351 GR. CF3M
Bonnet	N91229-42-0021	ASME SA351 GR. CF3M
b. Bar Stock and Forgings		
Support Rods	—	—
Nozzle	N91227-44-0031	ASME SA479 TYPE 316L
Disc	N91228-52-0039	ASME SA479 TYPE 316L
	N88830-87-1192	
Spring Washers	N88830-87-1189	ASME SA479 TYPE 316
Adjusting Bolt	N88869-73-0124	ASME SA479 TYPE 316
Spindle	—	—

10000029307

1.1

9

Form NV-1 (Back) Certificate Holder's Serial No. N61193-00-0006

	Serial No. Identification	Material Specification Including Type or Grade
c. Spring	NX3236-0019	ASTM A313 TYPE 316
d. Bolting	—	—
e. Other Parts such as Pilot Components		
SPINDLE POINT	N89444-71-0081	ASME SA479 TYPE 316
SPINDLE ROD	N93950-43-0024	ASME SA479 TYPE 316
SPINDLE BALL	N93916-0159	ASTM A276 TYPE 440C
BONNET STUD	N95882-AAG	ASME SA193 GR. B7
BONNET NUT	N95883-AAN5	ASME SA194 GR. 2H
NOZZLE RING	N93930-39-0018	ASME SA637 GR. 718
GUIDE	N93931-40-0020	ASME SA479 TYPE 316L

We certify that the statements made in this report are correct.

Date 1 NOV. 20 10 Signed Anderson Greenwood Crosby Mansfield, MA Manufacturer By Carol Allen

Certificate of Authorization No. N-1878 Expires 26-Nov-10 Date

CERTIFICATE OF SHOP INSPECTION

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

HSB - CT

have inspected the equipment described in this Data Report on

10/21 20 10 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 10/1 20 10

(Inspector) Commissions RI 904 A, N (National Board, State, Province and No.)

10000029307

1.2

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

As Required by the Provisions of the ASME Code Section XI

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

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

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

4. **Identification of System:** Chemical & Volume Control System

Date: 01/19/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 800486288-0010

WO: 800486288, 800631801

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, S. '73 addenda (ASME III, Class 1 valve installed in a Class 2 system).

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

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
2" 1513 # Y-Check Valve	Kerotest	MA2-8	N/A	S31208MU122	1976	Corrected	Yes
Disc	Kerotest	S/N:AHG12-10 Heat #	N/A	SA479 Type 316 RSO-4014-84	1984	Installed	Yes

7. **Description of Work:**

The 2" check valve in plant location S3.CVCS.S21208MU122 was overhauled to correct seat leakage. A new disc was installed in conjunction with the overhaul under NMO 800486288. The valve failed the seat leakage test after reassembly and had to be reworked under NMO 800631801 to obtain a satisfactory seat leakage test. A system leakage test and VT-2 examination was performed when valve was returned to service.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

Pressure: 2253 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** The replacement disc was certified to Class 1.

(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: for Al Meichler Supervising ASME Code Engineer Date: 2/28/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 11/17/10 to 2/10/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 4/19/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** Feed Water System (1305)

Drawing: S3-FW-190-H-017 (DCNs 1-3)

Date: 01/24/2011 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 003-11

WO: 800641603

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2-NF, 1974 Edition, Summer 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Spring Hanger Support	Grinnell/Anvil	N/A	N/A	S3-FW-190-H-017	----	Corrected	No

7. **Description of Work:**
The spring hanger cold setting was found to be out of tolerance (reference NN 201263887) and requires adjustment. The as-found setting was 1-1/2" (5400# load) and was required to be 2-1/8" +/- 1/2". The lower end of the spring support rod was bottomed out on the eye nut and cannot be adjusted without trimming length. The as-found rod length of 20" was trimmed to 18-1/8". The spring can was readjusted to within tolerance. The as-left setting was 1-3/16" (5670# load). A VT-3 examination was performed after restoration of the spring hanger support (reference Report No. 3VT-004-11).

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:** X

VT-3: X **Pressure:** N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: Roger Holmes for AB Meichler Supervising ASME Code Engineer Date: 1/24/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 1/14/11 to 1/21/11, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 3/7/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** Safety Injection System

Date: 05/06/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 011-10

WO: 800550895 / 800516738

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2 ,(NC) 1974 Edition, 1974 Addenda
   NDE methods and acceptance per 1995 Edition, 1996 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" Sch. 10 Pipe Spool	Bechtel Corp.	N5 / SN S3-1204-24	N/A	S3-1204-ML-131	78	Modified	No
4" Sch. 40 Pipe 15'	Tubacex	Heat # 41194	N/A	ILN# 10000026406 SA376 Gr. TP 304	N/A	Installed	No
4" Sch. 40 90 deg. Elbow 3ea.	Taylor Forge	Heat # MUNW-2	N/A	ILN# 10000026397 SA403 Gr. WP304/304L	N/A	Installed	No
4" Sch. 90 90 deg. Elbow 1ea.	Taylor Forge	Heat # MUNW-1	N/A	ILN# 1000023709 SA403 Gr. WP304/304L	N/A	Installed	No
4" x 6" Sch. 40 Reducer 1ea.	Taylor Forge	Heat # MMLQ1	N/A	ILN# 10000027175 SA403 Gr. WP304/304L	N/A	Installed	No

7. **Description of Work:** The replacement of the ECCS stainless steel piping on line number S3-1204-ML-131, in accordance with NCEP 800516571. This work scope provided for the installation of the schedule 40 piping ,and to install a low carbon grade of stainless steel for corrosion enhancement and design improvement. The piping components were pre-fabricated under NMO 800550895 and weld record WR3-10-067. The installation phase is under NMO 800516738. All NDE examinations were performed in accordance with the supporting weld record.

   Reference RRP 011-10, NECP 800516571
   WR3-10-067, WR3-10-067

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: FOR AB MEICHLER Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** Safety Injection System

Date: 05/06/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev. 1

WO: 800550896 / 800579805 / 800571506

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NF) 1974 Edition, 'S' 1974 Addenda
   NDE method and examination per 1995 Edition, 1996 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" NPS Sch. 10 Pipe Spool	Becthel Corp.	N5/SN S3-1204-24	N/A	S3-1204-ML-151	78	Modified	No
2" NPS Sch. 40 Dummy Stub 1ea.	Tioga	Heat # S3-SI-131-H-008	N/A	ILN # 3B889 SA376 TP304	N/A	Installed	No
2" NPS Sch. 40 Dummy Stub 1ea.	Tioga	Heat # S3-SI-131-H-010	N/A	ILN # 3B889 SA376 TP304	N/A	Installed	No

7. **Description of Work:** During the replacement of line number S3-1204-ML-151, it was required to replace the 2" NPS dummy stubs. The dummy stub end plates, along with a rear bracket end plate material had reused. All NDE examinations were performed on all welds in accordance with the weld record.
   Weld Records: WR3-10-099, WR3-10-100, WR3-110

   Reference: RRP 014-10 Rev. 1, NECP 800516572

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: For AB Meichler Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** Safety Injection System

Date: 05/06/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 012-10

WO: 800550896 / 800516738

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NC) 1974 Edition, 1974 Addenda
   NDE methods and acceptance per 1995 Edition, 1996 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" Sch. 10 Pipe Spool	Bechtel Corp.	N5 / SN S3-1204-24	N/A	S3-1204-ML-151	78	Modified	No
4" Sch. 40 Pipe 19'-5"	Tubacex	Heat # 41194	N/A	ILN # 10000026406 SA376 Gr. TP304	N/A	Installed	No
4" Sch. 40 90 deg. Elbow 1ea.	Taylor Forge	Heat # MUNW-2	N/A	ILN # 10000026406 SA403 Gr. WP304	N/A	Installed	No

7. **Description of Work:** The replacement of the ECCS 4" stainless steel piping on line number S3-1204-ML-151, in accordance with NECP 800516571. This work scope provided for the installation of schedule 40 piping ,and to install a low carbon grade of stainless steel for corrosion enhancement and design improvement. The piping component were pre-fabricated under NMO 800550896 and Weld Record WR3-10-068. The installation phase is under NMO 800516738. All NDE examination were performed on all welds in accordance with the supporting weld record.

   Reference: RRP 012-10, NECP 800516511, WR3-10-068

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: For AB Meichlen Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** Safety Injection System

Date: 05/06/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: RRP 014-10 Rev. 1

WO: 800571506 / 800579805

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NF) 1974 Edition, 'S' 1974 Addenda
   NDE method and examination per 1995 Edition 1996 Addenda
   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. ***Identification of Components:***

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
4" Sch. 10 Pipe Spool	Bechtel Corp.	N5/SN S3-1204-24	N/A	S3-1204-ML-131	78	Modified	No
Lugs 1"x1-1/2"x 1"	Dubose National	Heat # 37753 S3-SI-131-H-008	N/A	ILN # 100002815 SA240 Gr. 304	N/A	Installed	No
Lugs ½"x 2"x2-1/2"	Dubose National	Heat # 5JK3 S3-SI-131-H-010	N/A	ILN # 10000028901 SA240 Gr. 304	N/A	Installed	No

7. **Description of Work:** During the replacement of line number S3-1204-ML-131 it was required to replace a section of the pipe support lugs. The fabricated lugs were pre-fabricated under NMO 80057156 and installed under 800579805, along with weld records WR3-10-097 and WR3-10-098. All NDE examinations were performed on all welds in accordance with the weld record.

   Reference: RRP 014-10 Rev.1, NECP 800516572, WR3-10-097, WR3-10-098

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: FOR AJS MEICHLER Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Date: 05/05/2011 **Sheet 1 of 1**

Unit: 3

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

Repair/Replacement Plan: 010-10, Rev 1

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

WO: 800550894, 800516800

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-080, Sht 3 (ECN D0043214)

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, summer 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1204-ML-080	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 42262	N/A	ILN 10000026405 SA-376-TP304 (note 1)	—	Installed	No
6" Sch 40S Pipe	Consolidated Pipe & Supply	Ht # 045651	N/A	ILN 10000019514 SA-376-TP304 (note 1)	—	Installed	No
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 3F706	N/A	ILN 10000027815 SA-376-TP304 (note 1)	—	Installed	No
10"x6" BW Eccen. Reducer, Sch 40S	Tioga Pipe Supply Co.	Ht # MVRK-1	N/A	ILN 10000027176 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Tioga Pipe Supply Co.	Ht # MWHD-2 Ht # MWHD-3	N/A	ILN 10000026395 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Tioga Pipe Supply Co.	Ht # MWNG-2	N/A	ILN 10000027811 SA-403-WP304 (note 2)	—	Installed	No
6" Sch 40S, BW, 90° elbows	Consolidated Pipe & Supply	Ht # MQOW-2	N/A	ILN 10000019420 SA-403-WP304 (note 2)	—	Installed	No

7. **Description of Work:**
The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-080, sht 3 was replaced with schedule 40S per NECP Order 000800516751. Replacement materials had Carbon content restricted to 0.03% max.

Note 1: Reference RoR 014-03
Note 2: Reference RoR-020-03

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___
See: NMO 800516800, Operation 0270 **Pressure:** 173 **psig** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: Roger L Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

WAZCHg
Inspector's Signature

Commissions NB 13402 A, N, I CA2093
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Date: 05/05/2011 **Sheet 1 of 1**

Unit: 3

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

Repair/Replacement Plan: 010-10, Rev 1

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

WO: 800550894, 800516739 (note 1)
800611068 (note 2)

4. **Identification of System:** 1204, ECCS system

Isometric: S3-1204-ML-080, Sht 2 (ECN D0043212)

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, 1974 Edition, summer 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-1204-ML-080	Pullman Inc.	N5 S3-1204-24	N/A	------	1978	Removed	Yes
6" Sch 40S Pipe	Tioga Pipe Supply Co.	Ht # 42262	N/A	ILN 10000026405 SA-376-TP304 (note 3)	—	Installed	No
6" Sch 40S, 90° elbows (2 each)	Tioga Pipe Supply Co.	Ht # MWHD-2	N/A	ILN 10000026395 SA-403-WP304 (note 4)	—	Installed	No

7. **Description of Work:**
The existing schedule 10S piping shown on Iso Dwg S3-1204-ML-080, sht 2 was replaced with schedule 40S per NECP Order 000800516751. Carbon content of replacement materials was restricted to 0.03% max.

Note 1: Scope includes material verification and pre-fabrication of pipe spools. Performed by Edison Construction Group.
Note 2: Scope includes piping installation field welds. Performed by contractor (WSI). See WSI Traveler 205913-TR-325-04 & WSI NCR 10-266.
Note 3: Reference RoR 014-03
Note 4: Reference RoR-020-03

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure: X Exempt:___ Other:___**

See: NMO 800516739, Operation 0375 **Pressure: 173 psig** **Test Temp: N/A °F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: Roger Y Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/5/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB 13402 A, N, I CA2093
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/05/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev.1

WO: 800579808 / 800571506

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NF) 1974 Edition, 'S' 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 Pipe Spool	Bechtel Corp.	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	78	Modified	No
Pipe Support S3-FS-107-H-001	Dubose National	Heat # 40187	N/A	ILN # 10000022302 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-006	Dubose National	Heat # 40187	N/A	ILN # 10000023302 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-007	Consolidated Pipe	Heat # 045651	N/A	ILN # 100000192461 4" NPS, Sch. 40 / SA376 TP304	N/A	Installed	No
Pipe Support S3-FS-107-H-009	Dubose National	Heat # 40187	N/A	ILN # 10000022302 4" NPS, Sch. 40 / SA376 TP304	N/A	nstalled	No

7. **Description of Work:** During the replacement of line number S3-1219-ML-107, it was also required to replace a section of the pipe support dummy stubs. The 4" NPS schedule 40 pipe stubs are welded to the replacement piping, based on the design that are NF. All NDE examinations were performed on all welds in accordance with the weld record.

Weld Record Numbers	Pipe Support Numbers
WR3-10-101	S3-FS-107-H-001
WR3-10-103	S3-FS-107-H-006
WR3-10-104	S3-FS-107-H-007
WR3-10-105	S3-FS-107-H-009

References RRP 014-10
NECP 800516572

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: FOR A.B. MEICHLER Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/17/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/05/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10 Rev. 1

WO: 800579808 / 800571506

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2 , (NF) 1974 Edition 'S' 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 Pipe Spool	Bechtel	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	78	Modified	No
Pipe Support S3-FS-107-H-005	Dubose National	Heat # 250714	N/A	ILN # 10000028114 1"x2" Lugs / SA240 Gr.304	N/A	Installed	No
Pipe Support S3-FS-107-H-001,006,007,009	N/A	N/A	N/A	S3-1219-ML-107 dummy stub to end plate welds	N/A	Reinstalled	No
Pipe Support S3-FS-107-H-001,006,007,009	N/A	N/A	N/A	S3-1291-ML-107 rear bracket to end plate weld	N/A	Reinstalled	No

7. **Description of Work:** During the replacement of line number S3-1219-ML-107, it was also required to replace the lungs and reinstall the dummy stub to end plates, along with the rear bracket end plates. These are NF designed pipe supports that required material replacement and welding. All NDE examinations were performed on all welds in accordance with the weld record.

Weld Record Numbers	Pipe Support Numbers
WR3-10-102	S3-FS-107-H-005
WR3-10-106	S3-FS-107-H-001, 006, 007, 009
WR3-10-107	S3-FS-107-H-001, 006, 007, 009

Reference: RRP 014-10 Rev. 1
NECP 800516572

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: for A.B. Meichler Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/17/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** 1219 Fuel Pool Cooling System

Date: 05/04/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 009-10

WO: 800550897 / 800553023 / 800571506

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 2, (NC) 1974 Edition 'S' 1974 Addenda
   NDE methods and acceptance per 1995 Edition 1996 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** *1995* Edition; *1996* Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
10" Sch. 10 pipe spool	Bechtel Corp.	N5 / SN S3-1219-4	N/A	S3-1219-ML-107	74	Modified	No
10" Sch. 40 pipe 21'-4"	Jinghang	Heat #YX0810-02	N/A	ILN# 10000026504 SA376 TP304/304L	N/A	Installed	No
10" Sch. 40 elbow 1ea.	Taylor Forge	Heat # MVRK-1	N/A	ILN # 1000026396 SA-403 Gr. WP304	N/A	Installed	No
10" Sch. 40 Flange 1ea.	Tioga Pipe	Heat # GHH	N/A	ILN # 10000026403 SA-182 Gr. WP304	N/A	Installed	No
7/8" Studs 36" Length	Mackson Inc.	Heat # 470650	N/A	ILN # 10000010325 SA-193 Gr. B7	N/A	Installed	No
7/8" Nuts 24 ea.	Cardinal	Heat # 301372	N/A	RSO # 3131-92 SA-194 Gr. 2H	N/A	Installed	No

7. **Description of Work:** The replacement of the ECCS stainless steel piping on line number S3-1219-ML-107 in accordance with ECP 800516571. This work scope provided for the installation of schedule 40 piping and to install a low carbon grade of stainless steel for corrosion and design improvement. The piping components were pre-fabricated under NMO # 800550897 and Weld Record WR3-10-063 and installed under NMO # 8005503023. All NDE examinations were performed on all welds in accordance with the weld record.
   References: RRP 009-10, NECP 800516572

8. **Tests Conducted: Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:** X **Exempt:**___ **Other:**___

   See:_____ **Pressure:** 175 **psi Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: For A.B. Meichler Supervising ASME Code Engineer Date: 05/06/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 9/3/10 to 12/27/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions NB13402-1 CA2093 California
(National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** 1204, ECCS

Date: 05/06/11 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plan: 014-10, R1

WO: 800571506, 800579805

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, NF (Class 2), 1974 Edition, Summer 1974 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
S3-SI-080-H-027	Bechtel	N5 S3-1204-24	N/A	—	1978	Corrected	No
2-1/2" x 3" x 1-1/2" Lugs, 4 each	Dubose National Energy Services	Heat # 250432	N/A	ILN 10000028116 SA-240 type 304	—	Installed	No
S3-SI-080-H-028	Bechtel	N5 S3-1204-24	N/A	—	1978	Corrected	No
3" Sch 40S, Dummy Stub, 1 each	Tioga Pipe Supply	Heat # 3D061	N/A	ILN 10000027357 SA-376 TP304	—	Installed	No
S3-SI-080-H-033	Bechtel	N5 S3-1204-24	N/A	—	1978	Corrected	No
3" Sch 40S, Dummy Stubs, 2 each	Tioga Pipe Supply	Heat # 3D061	N/A	ILN 10000027357 SA-376 TP304	—	Installed	No

7. **Description of Work:**

The integral attachments listed above were attached by welding to line number S3-1204-ML-080 in conjunction with replacement of the piping on NECP 800516572. The material verification was performed on work order 800571506 and welding and NDE were performed on 800579805.

8. **Tests Conducted:** **Hydrostatic:**___ **Pneumatic:**___ **Nominal Operating Pressure:**___ **Exempt:**___ **Other:**___

Pressure: N/A **psi** **Test Temp:** N/A **°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: Roger D Holmes for AB Meichler Supervising ASME Code Engineer Date: 5/6/11
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 **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 10/12/10 to 12/8/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

WAZCMg Commissions NB13402 A, N, I CA2093
Inspector's Signature (National Board, State, Province, and Endorsements)

Date 5/6/11

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. **Owner:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

2. **Plant:** San Onofre Nuclear Generating Station
   Address: P.O. Box 128, San Clemente, CA 92672-0128

3. **Work Performed by:** Southern California Edison Company
   Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

4. **Identification of System:** 1201 (Reactor Coolant System)

Dwgs: 48001 Sh 2 (ECN D0028777), 48001 Sh 3 (ECN D0028780)
SO23-617-1-D113 & D114
SO23-617-1-D613, D1240 & D1241
SO23-617-1-D614, D1242 & D1243
SO23-617-1-D1453, D1478, D1483 & D1266
SO23-617-1-D1501

Date: 11/12/2010 **Sheet 1 of 1**

Unit: 3

Repair/Replacement Plans: 3-M0P-7054-1, R2 & 3-M0P-7054-1A

WO: 800460432

NECP: 800072650, 800072652 and 800072648

WP&IR: 25221-003-M0P-7054-00001-000 & WCN 25221-003-M0N-7054-00001

Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

5. (a) **Applicable Construction Code:** ASME Section III, Class 1, 1998 Edition, 2000 Addenda

   (b) **Applicable Edition of Section XI Utilized for Repair/Replacement Activity:** 1995 Edition; 1996 Addenda

6. **Identification of Components:**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped Yes/No
Replacement Steam Generator (RSG)	Mitsubishi Heavy Industries	B-SGP-113	5865	S31301ME088 RSO-0018-10	2010	see block 7	Yes

7. **Description of Work:** The hydrostatic test caps welded to the vessel primary side nozzles by the manufacturer were cut off and machine beveled in preparation for installation of the replacement vessel. Included in this scope was: one each 42" ID reactor coolant hot leg nozzle, two each 30" ID reactor coolant cold leg nozzles and four 3/4"NPS primary instrument tap nozzles. Surface examinations were performed on the newly machined surfaces of the nozzle bevels and the machine chuck contact areas on the ID of the hot and cold leg nozzles. No indications were found.

After the original steam generator (OSG) was removed, the sliding base was templated and compared with the corresponding bolt holes on the RSG lower support skirt. Some of the studs on the sliding base were slightly out of the expected bolt circle or spacing tolerances. To avoid any potential interference problems during RSG installation, the lower support skirt bolt holes were enlarged in the problem areas (bolt holes # 9, 11, 28, 37 & 38).

8. **Tests Conducted: Hydrostatic:___ Pneumatic:___ Nominal Operating Pressure:_X_ Exempt:___ Other:___**

No pressure testing is required for this work scope. **Pressure:_____psi Test Temp:_____°F**

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ in. x 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each sheet is initialed and dated by the Owner or owner's designee and the AIA.

FORM NIS-2 (back)

9. **Remarks:** None.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A Expiration Date: N/A

Signed: FOR AB MEICHLER Supervising ASME Code Engineer Date: 05/09/11
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 **Minnesota**, and employed by **HSB-CT** of **Hartford, CT** have inspected the components described in this Owner's Report during the period 5/13/10 to 11/15/10, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions NB13402-1 CA2093 ~~NB6752 A, B, I, N, NS~~ ~~MN054531~~ 5/9/11
(National Board, State, Province, and Endorsements)

Date 5/9/11