

April 16, 2001

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

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

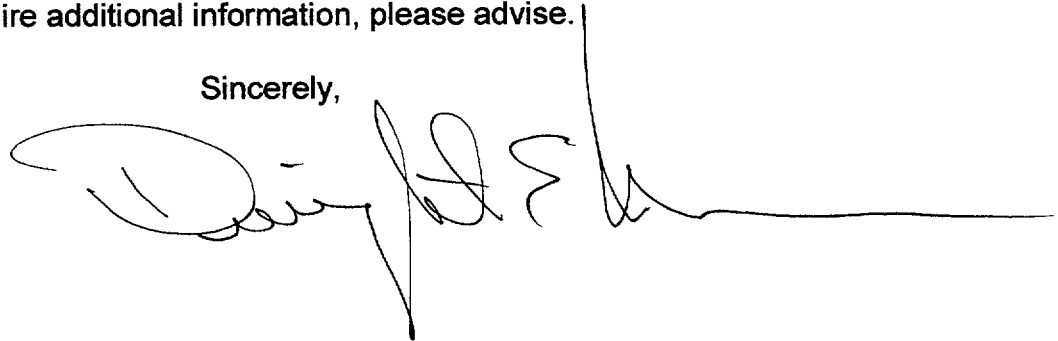
Reference: American Society of Mechanical Engineers (ASME)
Boiler and Pressure Vessel Code (ASME B&PVC)
Section XI: 1989 Edition: No Addenda;
Second Inspection Interval

Gentlemen:

In accordance with 10CFR50.55(a)(g) and ASME B&PVE, Section XI, Article IWA-6000, this letter submits the Inservice Inspection (ISI) Summary Report, including the Owner's Report of Repairs and Replacements, for San Onofre Nuclear Generating Station, Unit 3.

This report covers the period from May 10, 1999 through February 03, 2001, the date Unit 3 returned to service following its cycle 11 refueling outage. If you have any questions or require additional information, please advise.

Sincerely,



Attachment

cc: (see attached list)

A047

Document Control Desk
San Onofre Nuclear Generating Station
Unit 3

-2-

April 16, 2001
USNRC ISI Owners Report

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
A. T. Howell, III, Director, Division of Reactor Safety, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 & 3
L. Raghavan, NRC Project Manager, San Onofre Units 2 and 3

Gerald Quinn, Senior Safety Engineer
Division of Occupational Safety and Health
Pressure Vessel Unit
2100 E. Katella Ave.
Anaheim, CA 92806-6040

J. LeMire, Principal Safety Engineer
Division of Occupational Safety and Health
Pressure Vessel Unit
2100 E. Katella Ave.
Anaheim, CA 92806-6040



**SAN ONOFRE
NUCLEAR GENERATING
STATION UNIT-3**

***INSERVICE INSPECTION SUMMARY
REPORT***

**2nd INTERVAL, 2nd PERIOD CYCLE-11
REFUELING OUTAGE**

U3C11

SITE TECHNICAL SERVICES

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1 INTRODUCTION

This document refers to the implementation of the Inservice Inspection (ISI) conducted at the San Onofre Nuclear Generating Station (SONGS) Unit 3 for the 2nd Period of the 2nd Interval.

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

Each 10-year Interval is further divided into 3 periods which is adjusted to accommodate 2 refueling outages in each period. Adjustments of the intervals to accommodate these refueling outages is allowed by the code to extend or decrease the interval by as much as 1 year. These extension was used in the 1st 10-year interval which ended in March 1994.

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

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

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

<u>PERIODS</u>	<u>DATES</u>	<u>OUTAGES</u>
1	Apr 1, 1994 - Aug 17, 1997	U3C8, U3C9
2	Aug 18, 1997 - Aug 17, 2001	U3C10, U3C11
3	Aug 18, 2001 - Aug 17, 2003	U3C12

ASME Code Section XI, Article IWA-6000, Records & Reports, the ISI Program 90064 Rev 5, and the ISI procedures were used to put this report together. This report is intended to provide a summary of the ISI activities performed during the Unit 3 Cycle 11 outage. Detailed descriptions of these activities are documented, controlled and maintained in accordance with the Owner's Technical Specification commitments.

2 PLAN & SCHEDULE

SUBSECTION	CATEGORY	TOTAL EXAMS REQUIRED	PERIOD 1	PERIOD 2	PERIOD 3
IWB	B-A	27	3	2	22
	B-B	6	2	2	2
	B-D	34	10	0	24
	B-F	28	9	10	9
	B-G-1	248	84	82	82
	B-G-2	177	61	56	61
	B-J	160	55	54	52
	B-K	10	6	3	3
	B-L-1	2	0	0	2
	B-L-2(See Note-3)	1			
	B-M-1	8	2	0	6
	B-M-2(See Note-3)	6	1	2	
	B-N-1	3	1	1	1
	B-N-2	30	0	0	30
	B-N-3	2	0	0	2
	B-O	10	0	0	10
	B-P	Each Refueling Outage			
	B-Q	Per Tech Spec			
IWC	C-A	20	5	8	7
	C-B	8	2	2	4
	C-C	46	25	15	15
	C-F-1	246	76	92	78
	C-F-2	28	12	9	9
	C-G	5	1	2	2
	C-H	Each Inspection Period			
IWD	D-A (System Pressure Test) Each Inspection Period				
	D-B (System Pressure Test) Each Inspection Period				
	D-C (System Pressure Test) Each Inspection Period				
	D-A(Integral Attach's)	50	18	17	17

2 PLAN & SCHEDULE

SUBSECTION	CATEGORY	TOTAL EXAMS REQUIRED	PERIOD 1	PERIOD 2	PERIOD 3
IWF	F-A	268	92	89	87
IWE	E-A	443	1	1	441
	E-C	6	2	2	2
	E-D	3	1	1	1
	E-G	99	0	0	99
	E-P PER 10 CFR 50 APPENDIX J				
IWL	L-A (Concrete surfaces)		Every ten years		
	L-B(Unbonded Post-Tensioning System) Every five years alternative, Item L2.10, L2.20, and L2.30, L2.40, L2.50				
	Augmented ISI for Reactor Coolant pump flywheels and high energy lines				
	Flywheels	4	4	0	4
	High Energy line welds	203	69	68	66

Notes : 1) For Class MC components (IWE), 1st Period examination shall be completed by September 9, 2001, as mandated by the NRC final rule August 8, 1996. Remaining two periods for the 1st interval of IWE, 2nd Period : September 9, 2001 to September 8, 2005, 3rd Period : September 9, 2005 to September 8, 2008.

2) For Class CC components (IWL), Inspection Schedule shall comply with IWL-2421

3) Examination required when pump or valve is disassembled.

3 SUMMARY REPORT

Date of Document Completion.....March 29, 2001

Name & Address of Owners:

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

San Diego Gas & Electric Co.
101 Ash St.
San Diego, CA 92112

City of Anaheim
Public Utilities Department
City Hall West - 8th Floor
Ste. 802, 201 S. Anaheim Blvd.
Anaheim, CA 92805

City of Riverside
Public Utilities Department
3900 Main St.
Riverside, CA 92522

Name & Address of Generating Plant:

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

Number Designation of the Unit.....Unit 3

Commercial Service Date for the Unit.....April 4, 1984

REFUELING OUTAGE NO.

Refueling Outage Number:

U3C11

FORM NIS-1 (back)

8. Examination Date: May 10, 1999 to February 03, 2001
9. Inspection Period Identification: 1st Period X 2nd Period 3rd Period
10. Inspection Interval: 1st 10-Yr X 2nd 10-Yr 3rd 10-Yr 4th 10-Yr
11. Applicable Edition of Section XI...For IWB, IWC, IWD, IWF 1989 Edition, No Addenda,
For IWE, IWL 1992 Edition with 1992 Addenda, For
App.VIII (PDI) 1995Edition with 1996 Addenda
12. Date/Revision of Inspection Plan...October 5, 1999 Doc # 90064, Rev 5
13. Abstract of Examination & Test.....See page 9
14. Abstract of Results of Examinations & Tests:.....See page 10
15. Abstract of Corrective Measures:.....See page 11

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

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

Date: 3/29/2001 Signed: Southern California Edison By: M. P. Sholt
(Owner) Manager, Site Technical Services

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 Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report during the period May 10, 1999 to February 03, 2001 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.

[Signature]
Inspector's Signature

Commissions 1862 CA, 8024 NB "B" N.I.S.I.
NB, State, Province or Endorsements

Date: 3/30/01

ABSTRACT OF EXAMINATIONS & TESTS

This report covers the inservice examination activities conducted at the San Onofre Nuclear Generating Station (SONGS), Unit 3. This activity is one of the two that are scheduled for the 2nd period of the 2nd 10-year interval as described in the ISI Program Plan submitted to NRC and Doc. 90064. The inservice examinations were conducted in accordance with the ASME Boiler and Pressure Vessel Code Section XI, 1989 Edition No Addenda for IWB, IWC, IWD, IWF as per the 2nd interval submittal of ISI program to the NRC. IWE and IWL examinations were performed in accordance with the 1992 Edition and the 1992 Addenda and ultrasonic examinations were performed in accordance with Appendix VIII(PDI) 1995 Edition with the 1996 Addenda, as modified by 10 CFR Part 50 RIN 3150-AE26, Federal Register September 22, 1999(Volume 64, Number 183).

The services of NDE Levels- II & III (UT, PT, MT, and VT) were contracted to and provided by Lambert, MacGill, Thomas, Inc. Additional VT Level-II services were provided by SCE.

ISI Visual Examinations (VT-2) performed in conjunction with the Reactor Coolant System pressure test was performed by SCE VT Level-II examiners. List of examinations and tests are included in attachment-1.

Factory Mutual Insurance Company provided the services of the Authorized Inspection Agency (AIA) Authorized Nuclear Inservice Inspectors (ANII's).

ABSTRACT OF RESULTS OF EXAMINATIONS & TESTS

The inservice and preservice examinations conducted at SONGS 3 were performed between 5/10/99 and 2/3/01. These examinations were performed to fulfill the requirements of 10CFR50.55a(g)(4) and IWA-1400, Owner's Responsibilities of ASME Code Section XI.

The number of components and supports for Class 1 and 2 selected for examination were based on the ISI Program Plan Doc. # 90064, Rev. 5 employing Inspection Program Plan B of the ASME Code Section XI, All the pressure retaining components of ASME Class 1, 2 and 3 System pressure test were performed per the requirement of ASME Code Section XI.

All the NDE personnel were certified in accordance with the Section XI Code requirements

In Class 1 and 2 components 83 welds/components were examined for volumetric examination, 30 for surface, and a total of 65 for a combined VT-1 and VT-3 visual examination.

As mandated by 10 CFR Part 50 RIN 3150-AE26, Federal Register September 22, 1999(Volume 64, Number 183) piping welds and RCP Studs were examined per Appendix VIII(PDI) 1995 Edition with the 1996 Addenda as modified by above Final Rule. All the UT examiners were qualified and certified in accordance with PDI and Final Rule.

For Subsection IWE (Containment Liner) general visual examination for Containment liner, VT-3 visual examination for floor to liner plate seal(moisture- barrier), and volumetric examination at two shell liner plate were performed

All the NDE examinations were found Code acceptable except for one 2 inch diameter pipe support where one of the lock nuts was found loose. However, the load bearing nut was found to be tight (intact) and functional.

ABSTRACT OF CORRECTIVE MEASURES

All the ISI NDE examinations were found Code acceptable, except for one 2 inch diameter pipe support ISI ID 03-028-200 (tag no. S3-RC-022-H-004), one of the lock nuts was found loose. However, the load-bearing nut was found to be tight (intact) therefore pipe support was functional.

Corrective measure action request 010100783 was generated. In accordance with ISI program and IWF-2430 additional supports 03-028-210(tag no. S3-RC-022-H-005) and 03-028-170(tag no. S3-RC-022-H-001) were examined by visual VT-3 for similar condition. No relevant indications were found and supports were acceptable. Loose lock nut on support 03-028-200 was tightened per design requirements. Visual VT-3 examination was acceptable. The support is scheduled for examination for the next period as required by the Code.

4 ABSTRACT OF NIS-2 REPAIRS & REPLACEMENTS

5 NDE RECORDS

NDE PROCEDURES:

1) Non PDI UT, PT, MT, and Visual examination procedures (1989 Edition No Addenda)

SO23-XXVII-20.47	Magnetic Particle Examination
SO23-XXVII-20.48	Liquid Penetrant Examination
SO23-XXVII-20.49	Visual Examination Procedure to Determine the Condition of Nuclear Parts, Components and Surfaces
SO23-XXVII-20.51	Visual Examination Procedure for Operability of Nuclear Components and Supports and Conditions Relating to their Functional Adequacy
SO23-XXVII-20.54	UT Examination of Nuclear Cooling System Ferritic Piping
SO23-XXVII-20.55	UT Examination of Nuclear Cooling System Austenitic Piping
SO23-XXVII-20.56	UT Flaw Sizing
SO23-XXVII-20.59	Planar Size Characterization to ASME Section XI Code Requirements
SO23-XXVII-20.66	UT of Vessel Welds & Adjacent Base Metal

2) Appendix VIII (PDI) UT Procedures (1995 Edition with the 1996 Addenda)

SO23-XXVII-30.5	Ultrasonic Examination of Ferritic Piping Welds
SO23-XXVII-30.6	Ultrasonic Examination of Austenitic Piping Welds
SO23-XXVII-30.7	Ultrasonic Examination of Bolts and Studs
SO23-XXVII-30.8	Ultrasonic Through Wall sizing in pipe welds

3) IWE Visual and UT thickness Measurements Procedures (1992 Edition with the 1992 Add.)

SO23-XXVII-30.1	Ultrasonic Thickness Measurements
SO23-XXVII-30.2	Visual Examination Procedure to Determine the Condition of Containment Surfaces and Pressure Retaining Bolting (VT-1)
SO23-XXVII-30.3	Visual Examination Procedure to Determine the Condition of Containment Surfaces and Gaskets, Seals and Moisture Barriers (VT-3)
SO23-XXVII-30.4	Visual Examination Procedure to detect Evidence of Degradation of Containment Structural Integrity or Leak Tightness (General Visual)

NDE PERSONNEL CERTIFICATION RECORDS

<u>NAMES</u>	<u>METHOD</u>	<u>LEVEL</u>	<u>Cert</u>	<u>Eye Test</u>
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Lambert MacGill & Thomas, Inc.

Layn R. Davis	UT, PT, MT	III	X	X
	VT-1 and 3	II	X	X
Mathew F. Kilpela	UT, PT, MT	II	X	X
Jeffery L. Devers	UT,	III	X	X
	PT, MT	II	X	X
Todd P. Blechinger	UT	III	X	X
	PT, MT	II	X	X

Southern California Edison (SCE)

Barry Seaholts	VT-1,2,3	II	X	X
T.M. Pierno	VT-1,2,3	II	X	X
H. Edward McNeill	VT-1,2,3	II	X	X
P. Fred Haderlie	VT-1,2,3	II	X	X
Joe Perschler	VT-2	II	X	X
David Schafer	VT-1,3	II	X	X
	(IWE/IWL)			
	VT-1C, VT-3C	II	X	X
	(IWL)			
Torrey Yee	VT-1,3	II	X	X
	(IWE/IWL)			
	VT-1C, VT-3C	II	X	X
	(IWL)			

6 ISI PROCEDURES & CONSTRUCTION WORK ORDERS

ISI Procedures

- SO123-IN-1 Inservice Inspection Program
- SO123-XVII-1 Inservice Inspection Program Implementation
- SO123-XVII-1.1 Inservice Inspection Maintenance
- SO23-XVII-3.1 Inservice Inspection of Class 1 Components and Their Supports
- SO23-XVII-3.1.1 Refueling Outage Interval Examination of the Reactor Coolant Pressure Boundary to Detect Leakage
- SO23-XVII-3.2 Inservice Inspection of Class 2 Components and Their Supports
- SO23-XVII-3.3 Inservice Inspection of Class 3 Components and Their Supports
- SO123-XVII-3.4 Location Reference Markers
- SO23-XVII-3.4 Inservice Inspection of Class MC Components and Metallic Liners of Class CC Components

ISI Construction Work Orders

Inside Containment.....00030244000
Outside Containment.....00030245000

7 MECHANICAL SEAL ASSEMBLY (MNSA).
VISUAL EXAMINATION RESULTS

As stated in letter from J. L. Rainsberry (SCE) to Document Control Desk (U.S. NRC), dated April 30, 1998; Subject : Docket Nos. 50-361 and 50-362, Use of the Mechanical Nozzle Seal Assembly (MNSA), San Onofre Nuclear Generating Station, Units 2 and 3 (Tac Nos. M99558 and M99599), visual examinations of all installed MNSA's were performed. Results of the inspection were acceptable per approved procedures.

8 STEAM GENERATOR EXAMINATIONS

January 26, 2001

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

Gentlemen:

Subject: Docket No. 50-362
 Special Report: Inservice Inspection of Steam Generator Tubes
 San Onofre Nuclear Generating Station, Unit 3

Reference: Steam Generator Program Guidelines, Nuclear Energy Institute Document
 Number NEI 97-06 [Original], dated December 1997

On January 18, 2001, Southern California Edison (SCE) completed the inservice inspection of steam generator tubes at San Onofre Nuclear Generating Station Unit 3. The attached report satisfies the following reporting requirements of Technical Specification 5.7.2.c:

- Within 15 days of inspection completion, report the number of tubes plugged and tubes sleeved in each steam generator;
- Within 12 months of inspection completion, report the complete results of steam generator tube inspections.

In addition, the contents of the report were prepared using the guidance contained in the above reference. In accordance with the suggested NEI guidance, the enclosed report includes:

- a. Scope of inspections performed;
- b. Active Degradation Mechanisms found;
- c. Nondestructive Examination (NDE) techniques utilized for each degradation mechanism;
- d. Number of tubes plugged or repaired during the inspection for each active degradation mechanism. Repair methods utilized and the number of tubes repaired by each repair method; and
- e. Total number and percentage of tubes plugged and/or repaired to date and the effective plugging percentage in each steam generator.

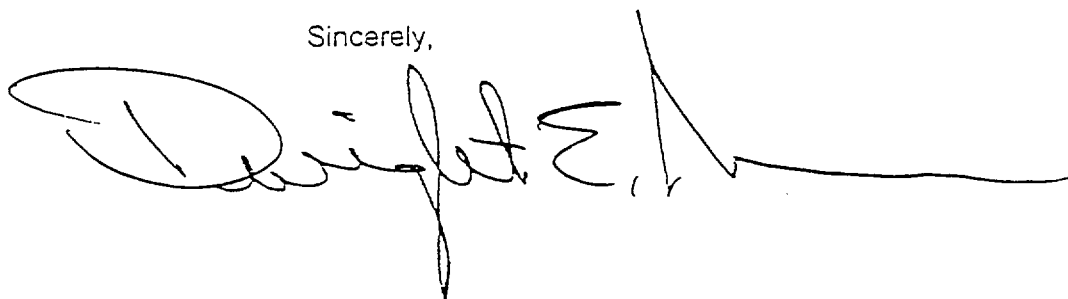
San Onofre Nuclear Generating Station, Unit 3

Special Report

This report also provides results of a secondary side inspection (SSI). This inspection of eggcrate tube supports was done on the secondary side of the steam generator, using remote-controlled visual equipment. Technical Specifications do not require this inspection, or associated reporting.

This report contains no new commitments. If you require any additional information, please advise.

Sincerely,

A handwritten signature in black ink, appearing to read "E. W. Merschoff", followed by a long horizontal line extending to the right.

Attachments:

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
L. Raghavan, NRC Project Manager, San Onofre Units 2 & 3
J. A. Sloan, NRC Senior Resident, San Onofre Units 2 & 3
Institute of Nuclear Power Operations (INPO)

SPECIAL REPORT - INSERVICE INSPECTION OF STEAM GENERATOR TUBES

Regulatory Reporting Requirements

Reporting Requirement 5.7.2.c of Appendix A, Technical Specification to Facility Operating License NPF-15, requires the number of tubes plugged and tubes sleeved in each steam generator to be reported to the Nuclear Regulatory Commission within 15 days following completion of the inspection.

Reporting Requirement 5.7.2.c of Appendix A, Technical Specification to Facility Operating License NPF-15, requires the complete results of steam generator tube inspections to be reported to the Nuclear Regulatory Commission within 12 months following completion of the inspection.

Planned Inspection Scope

Table 1 summarizes the planned inspection program. Also, when indications by the bobbin probe were non-quantifiable or distorted, the inspection program included inspection with the Plus-Point Probe. Table 3 provides the list of Nondestructive Examination (NDE) techniques utilized for each degradation mechanism.

Results of Inservice Inspection of Tubes

This report satisfies the listed regulatory reporting requirements.

The contents of this report are prepared using the guidance contained in NEI 97-06, Rev. 0, "Steam Generator Program Guidelines." The NEI guidance is an initiative to unify the industry approach towards steam generator issues and strengthen, where necessary, the steam generator program. In accordance with the suggested NEI guidance, the following five report contents are included within this report:

- (1) Scope of inspections performed;
- (2) Active Degradation Mechanisms found;
- (3) Nondestructive Examination (NDE) techniques utilized for each degradation mechanism;
- (4) Number of tubes plugged or repaired during the inspection outage for each active degradation mechanism. Repair methods utilized and the number of tubes repaired by each repair method; and
- (5) Total number and percentage of tubes plugged and/or repaired to date and the effective plugging percentage in each steam generator.

Table 2 summarizes significant inspection results, and active degradation mechanisms found. Each tube is only counted once in this listing, although it may also have an eddy current indication of a type below the point in the listing where it appears. The Appendices provide the complete results of the steam generator tubing inservice inspection.

Table 4 summarizes in-situ pressure and leak testing results. This particular testing demonstrated the structural and leakage (i.e., there was no leakage) integrity of the tested tubes consistent with EPRI guidelines and recent industry guidance.¹ Eddy current testing results and in-situ pressure and leak testing results provide assurance that performance criteria in the NEI guidance (structural integrity and accident-induced leakage) were met during operation prior to this inspection.

Results of Secondary Side Inspection (SSI) of Eggcrate Tube Supports

Remote visual inspections of the steam generator lattice supports for both steam generators at SONGS Unit 3 were completed. The results indicate no evidence of ongoing Flow Accelerated Corrosion (FAC). These results have been the same for the last three examinations. No tubes required plugging as a result of the secondary side inspection. The inspection encompassed twenty-six camera drops, which were performed from the upper most support structure, Eggcrate 10 (EC10), down to EC5 to examine these locations. With these results, the next inspection for eggcrate thinning will be scheduled for the Unit 3 Cycle 13 refueling outage, an interval of two cycles.

Repair of Tubes

Table 2 lists the number of tubes repaired by plugging for each steam generator. The sleeving repair method has never been used at Unit 3. Table 5 provides an itemized listing of the tubes plugged in steam generator E-088 along with the corresponding Table 2 category specifying the indication orientation/location. Table 6 provides an itemized listing of the tubes plugged in steam generator E-089 along with the corresponding Table 2 category specifying the indication orientation/location.

Repair Methods, Number of Tubes Repaired and Effective Plugging Percentage

All tube plugging was performed using the design, materials, and installation methods of FRAMATOME Technologies, Inc. (FTI). A "roll" method was used for all tube plugs. Two tubes in each steam generator were "stabilized" in the vicinity of the top of the tubesheet using the design, materials, and installation methods of FTI.

Fifty-seven tubes were plugged in Steam Generator E-088 during the Cycle 11 refueling outage. A total of 586 tubes have been plugged. No tubes have ever been sleeved in this steam generator. The design number of tubes is 9350 tubes. The effective plugging percentage for E-088 is 6.3%.

¹ Letter from Lawrence F. Womack (Pacific Gas and Electric Company) to Steam Generator Management Program Utility Steering Committees, et al., "Steam Generator Management Program (SGMP) Interim Guidelines on In Situ Pressure Testing of Steam Generator Tubes," dated October 13, 2000.

Forty-one tubes were plugged in Steam Generator E-089 during the Cycle 11 refueling outage. A total of 522 tubes have been plugged. No tubes have ever been sleeved in this steam generator. The design number of tubes is 9350 tubes. The effective plugging percentage for E-089 is 5.6%.

Description of Tables and Appendices

Table 1	-	Summary of the Planned Inspection Program for the Unit 3 Cycle 11 (U3C11) Refueling Outage
Table 2	-	Number of Tubes Repaired and Active Degradation Mechanisms Found During the U3C11 Refueling Outage
Table 3	-	List of Nondestructive Examination (NDE) Techniques Utilized for Each Degradation Mechanism for the U3C11 Refueling Outage
Table 4	-	Summary of Results of In-Situ Pressure and Leak Testing for the U3C11 Refueling Outage
Table 5	-	U3C11 Refueling Outage Tubes Plugged, Steam Generator E-088
Table 6	-	U3C11 Refueling Outage Tubes Plugged, Steam Generator E-089
Appendix 1	-	Steam Generator Reference Information
Appendix 2	-	Legend for Appendices 3 and 4
Appendix 3	-	Inspection Summary, Steam Generator E-088
Appendix 4	-	Inspection Summary, Steam Generator E-089

Appendix 1
Steam Generator Reference Information

Appendix 2

Legend for Appendices 3 and 4

List of Abbreviations and Format Used to Describe
the Indications from Rotating Probe Testing

<u>"I-Code" Abbreviations</u>	<u>Explanation of the Abbreviations</u>
SCI	Single Circumferential Indication
MCI	Multiple Circumferential Indications
SAI	Single Axial Indication
MAI	Multiple Axial Indications
MMI	Mixed Mode Indications
SVI	Single Volumetric Indication (i.e., no special axial or circumferential aspect)
MVI	Multiple Volumetric Indication (i.e., no special axial or circumferential aspect)

Format

In Appendices 3 and 4, a single line of data is associated with each individual rotating probe indication. Below is a descriptive example of the format.

SG	ROW	COL	VOLTS	DEG	PCT	CHAN	LOCATION	FROM	TO	EXTENT	UTIL 1	UTIL 2
11	45	59	+P VOLTS	+P DEG	CODE	CH #	LOCATION	+0.01		TSHTSH	PAN VOLTS	+ P LEN

1. All "I-code" indications require a single line entry. The example above displays the form of a Resolution report line. The VOLTS field contains the Plus-point P-to-P voltage of the largest, most representative response. The DEG field contains the corresponding phase angle. The PCT field contains the appropriate 3-letter code. The CHAN field contains the reporting channel (i.e. the appropriate 300kHz Plus-point channel). The LOCATION field contains the referenced landmark. The FROM field contains the axial distance from the landmark to the response measured above. The EXTENT field indicates the test extent. The UTIL 1 field contains the 300kHz 0.115" pancake P-to-P voltage of the largest, most representative response. The UTIL 2 field contains the measured Plus-point length of the indication. Exceptions to this general guidance are in paragraphs 2 and 3 below.
2. For axial indications of extended length, the location should be ranged in the FROM and TO fields. If the range of such an indication includes any part of a support structure, it should be referenced from that landmark.
3. For "I-code" indications which have both axial and circumferential extent (i.e. SVI, MVI, and MMI) the location should be ranged in the FROM and TO fields and the UTIL 2 field should contain the circumferential length.

Appendix 3
Inspection Summary
Steam Generator E-088
(22 Pages)

Appendix 4
Inspection Summary
Steam Generator E-089
(14 Pages)

9 ATTACHMENT- 1

**LIST OF COMPLETED ISI NDE EXAMINATIONS AND
SYSTEM PRESSURE TESTS**



UNIT-3 CYCLE-11, CLASS-1 AND 2, SYSTEM PRESSURE TESTS

<u>System</u>	<u>Procedure</u>	<u>Completion Date</u>
1) Reactor Coolant	SO23-XVII-3.1.1	01/28/2001
2) Chemical & Volume Control	SO23-XVII-3.2.1	01/28/2001
3) Main Steam	SO23-XVII-3.2.2	01/29/2001
4) Main & Aux. Feed Water	SO23-XVII-3.2.3	01/29/2001
5) Safety Injection	SO23-XVII-3.2.4	01/07/2001
6) Containment Spray	SO23-XVII-3.2.5	01/02/2001

10 ATTACHMENT- 2

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

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
MO: 00010843000
Rspec: ASME SECTION XI DATA-0460
PID: 40124BSO3 (C4)
N5: S3-1208-5
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0009	N/A	3PSV9227	1985	Replaced	Yes
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0012	N/A	Rebuilt on MO 00040182	1985	Replacement	Yes

7. Description of Work:

Replaced the relief valve located in plant position 3PSV9227 with an in-kind rebuilt and tested spare. The replacement spare was rebuilt and tested under MO 00040182. The removed valve to be rebuilt under MO 00120329.

8. Tests Conducted: System Functional Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-10

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/8/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 06/08/00 to 02/09/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

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

Unit: 3
CWO: 00011577000
Rspec: GEN-105s
PID: 40141ASO3 (F5)
N5: S3-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012

3. Work Performed by: Southern California Edison Company

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

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code ASME Section III, Class 1, 1971 Edition, S.71 Addenda; Code Case: None

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

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	CE	72270-2	22265	S31301ME088	1977	---	Yes
1"-8N-2A x 6" Handhole Stud (1)	ABB Combustion Engineering	Ht. #85689	N/A	RSO-2991-91, SA193 B7 (CR-2001-93)	N/A	Replacement	No
1"-8N-2B Handhole Nut (1)	ABB Combustion Engineering	Ht. #11472	N/A	RSO-2991-91, SA193 B7 (CR-2001-93)	N/A	Replacement	No

7. Description of Work:

The hand hole cover without instrument on Steam Generator S31301ME088 was removed and reinstalled. (1) each stud and (1) each nut (in location #10) were replaced with in-kind replacement bolting.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-14

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

FORM NIS-2 (back)

9. Remarks: CR-2001-93 reconciles the replacement bolting which was certified to ASME III-1, '74 Ed., W.'74 Add. (stud); ASME III-1, '80 Ed., W.'82 Add. (nut).

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/7/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 2/24/00 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00011659000
Rspec: GEN-105s
PID: 40141ASO3 (C5)
N5: S3-1201-3
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code ASME Section III, Class 1, 1971 Ed., S.'71 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	CE	72270-1	22264	S31301ME089	1977	—	Yes
Secondary Manway Stud 1 1/2"-8N-2A x 9" (2)	ABB Combustion Engineering	Ht. #82158, Tr. Code J-6391	N/A	RSO-0925-96, SA540 B24, Class 3	N/A	Replacement	No
Secondary Manway Nut 1 1/2"-8N-2B (2)	Nova Machine Products	Ht. #73265-32-2, Ht. Code RZW	N/A	RSO-1076-00, SA193 B7	N/A	Replacement	No

7. Description of Work:

The west secondary manway on steam generator S31301ME089 was removed and reinstalled. (2) each manway cover studs and (2) each manway cover nuts (location #1 and #2) were replaced with in-kind replacement bolting.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 000300903-15

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed:



Supervising ASME Codes Engineer

Date:

2/7/01

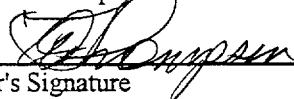
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 3/13/00 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature



Commissions

1862

California

National Board, State, Province, and Endorsements

Date

Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code ASME Section III, Class 1, 1971 Ed., S.'71 Addenda: Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 3
CWO: 00011662000
Rspec: GEN-150s
PID: 40141ASO3 (F5)
N5: S3-1201-3

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

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	CE	72270-2	22265	S31301ME088	1977	---	Yes
1 1/2"-8N-2A x 9" Manway Stud (1)	ABB Combustion Engineering	Ht. #82158, Tr. Code J-6391	N/A	RSO-0925-96, SA540 B24, Class 3	N/A	Replacement	No
1 1/2"-8N-2B Manway Nut (1)	ABB Combustion Engineering	Ht. #73265-32-2, Ht. Code RZW	N/A	RSO-1076-00, SA193 B7	N/A	Replacement	No

7. Description of Work:

The East Secondary Manway cover on Steam Generator S31301ME088 was removed and reinstalled. (1) each stud and (1) each nut (in location #16) were replaced with in-kind replacement bolting.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-14

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 2/7/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 3/13/00 to 2/8/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date

Feb. 8, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control
- Unit: 3
MO: 00021309000
Rspec: ASME SECTION XI DATA-0460
P&ID: 40124BSO3 (H2)
N-5: S3-1208-5
- 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; Code Case: None
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

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

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0012	N/A	3PSV9226	1985	Replaced	Yes
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0006	N/A	025-83508 (Rebuilt on MO 99110008)	1978	Replacement	Yes

7. Description of Work:

Replaced the relief valve located in plant position 3PSV9226 with an in-kind rebuilt and tested spare. The replacement spare was rebuilt and tested under MO 99110008. The removed valve to be rebuilt under MO 00040182.

8. Tests Conducted: System Functional Pressure Test

Pressure: NOP

Temp: N/A

See: AR 991101368-05

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

FORM NIS-2 (back)

9. Remarks : None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 6/9/00

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 04/03/00 to 06/09/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862

California

National Board, State, Province, and Endorsements

Date June 9, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, S.'73 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

Unit: 3
MO: 00022515001 01011523000
FCN: F15532M, F15533M
Rspec: ASME SECTION XI DATA-0247, 178-98
R1, 960600529-12
PID: 40114DSO3 (F7)
N5: S3-1204-10
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 1513# Globe Valve	Kerotest	CAQ-12-2	N/A	S31204MU068	1980	---	Yes
Disc	BW/IP International	(324506) S/N 2	N/A	RSO-0489-97, SA479 316	1997	Replacement	Yes
Bonnet	BW/IP International	AXR10-8	N/A	RSO-1819-937, SA479 316	1993	Replacement	No

7. Description of Work:

The valve currently installed in plant position S31204MU068 was modified by replacing the existing diaphragm seal with a one-piece stem/disc assembly and replacing the bonnet in accordance with Repair Specification 178-98 Rev. 1. MO 01011523 removed material from the disc seating surface in the valve body to accommodate the modification in accordance with Repair Specification 960600529-12. Reference: FCN's F15532M and F15533M.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 960600529-06

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

FORM NIS-2 (back)

9. Remarks: A Class 1 valve was installed in a Class 2 system.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/23/01 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 00032333002
Rspec: ASME SECTION XI DATA-0306
PID: 40123CSO3 (F7)
N5: S3120810
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, Summer 1973 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3" 150# Gate Valve	Walworth/Aloyco	A1485	718	S31208MU007	1976	---	Yes
Bonnet	Crane Valves	Ht.# C3705; Part s/n C4858	N/A	SA351-CF8M (Taken from spare valve s/n C4850) Ref: AR 000301936-5 & RSO-0537-96	N/A	Replacement	No

7. Description of Work:

The valve bonnet from the valve (s/n A1485) located in plant position S31208MU007 was replaced with a bonnet removed from spare valve (s/n C4850). The bonnet removed from valve s/n A1485 and the remaining parts from the spare valve were scrapped. Reference: AR 000301936-05 and RSO 0537-96 for the replacement bonnet.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 000301936-02

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

FORM NIS-2 (back)

9. Remarks : None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 8/16/00

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 05/02/00 to 08/16/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

August 16, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 00040617000
FCN: F21231M, F23563M, F23565M, F21081M
Rspec: 038-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40123B (E5)
N5: S3-1208-14
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Chemical and Volume Control
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda; 1992 Ed., No Add. (NDE/VT-2); Code Case: N-416-1
6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1" 600# Flow Control Valve	ITT Hammel Dahl	74/5797/015	N/A	3PV0201B	1977	Replaced	Yes
2" 600# Globe Valve	Control Components	36995-1-3	N/A	RSO-1407-00, SA182 F316	1985	Replacement	Yes
2" NPS Sch 40S Pipe	Energy & Process Co.	Ht. #448896	N/A	RSO-1671-00, SA312 TP304	N/A	Replacement	No
2" NPS Sch 40S Elbow	Energy & Process Co.	Ht. #00149	N/A	RSO-0959-00, SA403 WP304	N/A	Replacement	No
3" x 2" NPS Sch 40S Reducer	Energy & Process Co.	Ht. Code LUUK-1	N/A	RSO-1606-00, SA403 WP304	N/A	Replacement	No

7. Description of Work:

Replaced the existing Hammel Dahl valve in plant position 3PV0201B (s/n 74/5797/015), the associated piping and fittings with a new CCI valve (s/n 36995-1-3) in accordance with FCN F21081M and reconfigured pipework in accordance with Repair Specification 038-00, the associated weld records, and FCNs F21231M, F23563M, F23565M. Weld records WR3-00-370 R1, WR3-00-371R1, WR3-00-372 R1, WR3-00-373 R1, WR3-00-374 R1, and WR3-00-375 R1 replaced the existing valve and reconfigured the pipework. Weld record WR3-00-375 R2 weld repaired one location of the weld joint completed on WR3-00-375 R1 that was identified by radiography (3RT-007-00) to have a defect and radiography (3RT-008-00) was performed on the repaired area with satisfactory results in accordance with WR3-00-375 R2. WR3-00-397 sealwelded the 1/2" NPS packing leak-off port. All NDE was directed, documented and controlled by the weld records.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT
See: AR 990800957-24

This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 1/14/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 11/8/01 to 01/15/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date

Jan. 15, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 00070286000
FCN: F21558M, F21760M, F21265M
Rspec: 990800957-21
PID: 40123BSO3 (E5)
N5: S3-1208-4
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code ASME Section III, NF Class 2, 1974 Edition, S.'74 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Type-B Variable Spring & Hardware	Grinnell	C268	N/A	S3-VC-004-H-012	N/A	Permanently Deleted	No
Pipe Guide	---	N/A (Ref. FGD-P-89-5A)	N/A	S3-VC-004-H-022	N/A	Replaced	No
2" Pipe Support Strap	Anvil Int'l.	Part No. CL144N; Ht. Code A	N/A	RSO-1447-00, SA36; S3-VC-004-H-022	N/A	Replacement	No
Transverse Pipe Stop	---	N/A (Ref. FGD-P-127-5)	N/A	S3-VC-004-H-023	N/A	Replaced	No
2" Pipe Support Strap	Anvil Int'l.	Part No. CL143N; Ht. Code A	N/A	RSO-1447-00, SA36; S3-VC-004-H-023	N/A	Replacement	No

7. Description of Work:

Pipe supports S3-CV-004-H-012, S3-CV-004-H-022 and S3-CV-004-H-023 required removal or modifications in accordance with Repair Specification 990800957-21 and associated FCNs, to support installation of new valve in plant position 3PV0201B on MO 00040617. The existing variable spring and associated hardware (S3-CV-004-H-012) was removed and scrapped per FCN F21558M. The existing FGD-P-89-5A pipe guide (S3-CV-004-H-022) was removed and replaced with a Grinnell Fig. CL144N pipe strap in accordance with weld record WR3-00-376 and FCN F21760M. The existing FGD-P-127-5 transverse pipe stop (S3-CV-004-H-023) was removed and replaced with a Grinnell Fig. CL143N pipe strap in accordance with weld record WR3-00-377 and FCN F21265M.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 2/7/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 11/14/00 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: N
MO: 00101390000
Rspec: ASME SECTION XI DATA-0125
PID: N/A
N5: N/A
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Reactor Coolant
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1 (NF), 1974 Edition, S'75 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Hydraulic Snubber (826 KIP)	Paul Munroe Hydraulics	PD 16154-1824	N/A	026-40001 (spare RCP hydraulic snubber)	N/A	---	No
Snubber Control Valve	Paul Munroe Hydraulics	Original	N/A	---	N/A	Replaced	No
Snubber Control Valve	Enertech	S/N 455, Lot Code GR	N/A	RSO-2166-00, SA564 Tp.630	N/A	Replacement	No

7. Description of Work:

The rod side control valve on the spare RCP hydraulic snubber (026-40001) was replaced with an in-kind replacement control valve. After installation of the replacement control valve, a visual examination (VT-3) of the snubber was performed with satisfactory results.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks: None.

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

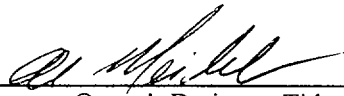
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

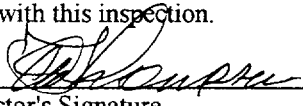
Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 10/24/00 to 02/23/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00111141000
FCN: F24425G
Rspec: 049-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40111BSO3 (E6)
N5: S3-1201-2
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add; Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	21E	N/A	S31201ME602	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	033	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME602 (at heater sleeve E2) in accordance with Repair Specification 049-00 and weld record WR3-00-500. Post weld NDE examination (3PT-030-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test

Pressure: NOP

Temp: NOT

See: AR 000300903-19

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

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed., No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature]

Supervising ASME Codes Engineer Date: 2/9/01

Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/29/00 to 2/9/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00111142000
FCN: F24426G
Rspec: 050-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40111BSO3 (E6)
N5: S3-1201-2
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add: Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	28E	N/A	S31201ME608	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	034	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME608 (at heater sleeve H4) in accordance with Repair Specification 050-00 and weld record WR3-00-601. Post weld NDE examination (3PT-031-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test

Pressure: NOP

Temp: NOT

See: AR 000300903-19

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed., No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer Date: 2/8/01

Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of **California**, and employed by **Factory Mutual Insurance Company** of **Johnston, Rhode Island** have inspected the components described in this Owner's Report during the period 12/29/00 to 02/09/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
CWO: 00111143000
FCN: F24427G
Rspec: 051-00
PID: 40111BSO3 (E6)
N5: S3-1201-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add: Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	14E	N/A	S31201ME609	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	035	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME609 (at heater sleeve A4) in accordance with Repair Specification 051-00 and weld record WR3-00-602. Post weld NDE examination (3PT-032-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test

Pressure: NOP

Temp: NOT

See: AR 000300903-19

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

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed., No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/9/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/29/00 to 2/9/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00111144000
FCN: F24428G
Rspec: 052-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40111BSO3 (E6)
N5: S3-1201-2
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Reactor Coolant
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add: Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	2E	N/A	S31201ME615	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	036	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME615 (at heater sleeve C4) in accordance with Repair Specification 052-00 and weld record WR3-00-603. Post weld NDE examination (3PT-033-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test

Pressure: NOP

Temp: NOT

See: AR 000300903-19

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

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed., No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 2/9/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/29/00 to 2/9/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00111145000
FCN: F24429G
Rspec: 053-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40111BSO3 (E6)
N5: S3-1201-2
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Reactor Coolant
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add; Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	4E	N/A	S31201ME617	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	038	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME617 (at heater sleeve B2) in accordance with Repair Specification 053-00 and weld record WR3-00-604. Post weld NDE examination (3PT-034-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT
See: AR 000300903-19

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

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed., No Addenda.

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

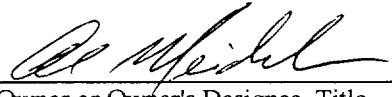
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

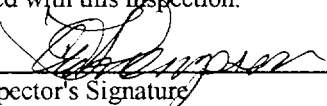
Signed: 
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 2/8/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/29/00 to 2/9/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 00111146000
FCN: F24430G
Rspec: 054-00
PID: 40111BSO3 (E6)
N5: S3-1201-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Reactor Coolant
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add: Code Case: 1361-2
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Pressurizer Heater	Watlow/C.E.	35E	N/A	S31201ME618	1981	Replaced	Yes
Pressurizer Heater	Framatome Technologies	039	N/A	RSO-1359-00, p/n 1251084-100 (CR-3001-98)	1998	Replacement	Yes

7. Description of Work:

A replacement pressurizer heater was installed in plant location S31201ME618 (at heater sleeve F3) in accordance with Repair Specification 054-00 and weld record WR3-00-605. Post weld NDE examination (3PT-035-01) was performed with satisfactory results.

8. Tests Conducted: System Leakage Pressure Test
See: AR 000300903-19

Pressure: NOP

Temp: NOT

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

FORM NIS-2 (back)

9. Remarks: CR-3001-98 reconciles the replacement pressurizer heater which was certified to ASME III-1, 1986 Ed.
No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

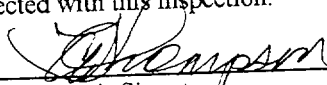
Supervising ASME Codes Engineer

Date: 2/8/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/29/00 to 2/9/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862 California
National Board, State, Province, and Endorsements

Date: Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 00111753000
FCN: F24385M
Rspec: 047-00
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40111ASO3 (E6)
N5: S3-1201-3
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code ASME Section III, Class 1, 1971 Edition, S.'72 Addenda; Code Case: N-474-1
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Thermowell	Rosemont	Line S3-1201-ML-001	N/A	3TE0112-2	N/A	Replaced	No
Thermowell, RCS Loop RTD	Weed Instrument Co.	N13230, Ht. #NX0643HG1	N/A	RSO-1795-99, SB166 Gr. 690	N/A	Replacement	No

7. Description of Work:

Repalced the existing thermowell in plant position 3TE0112-2 with a replacement thermowell fabricated by Weed Instrument Co. (on MO 99031617), in accordance with Repair Specification 047-00 and weld record WR3-00-496.
Reference: FCN F24385M

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT
See: AR 000300903-16

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/9/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 1/4/01 to 2/9/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

Feb. 9, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 00120667000
Rspec: 900500122-04
PID: 40111ASO3
N5: S3-1201-3
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Reactor Coolant
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Ed., S.'71 Add. (RX Vessel); 1977 Ed., W.'79 Add. (ICI Flange Assy.); Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Reactor Vessel	CE	72170	22001	S31101MV001A	1977	---	Yes
Instrument Flange Adapter Hub #94	CE	S/N 813911, Ht. #844949	N/A	Hub #94	N/A	Replaced	No
Instrument Flange Adapter Hub #94	CE	S/N 3, Ht. #687277	N/A	RSO-1427-90, SA182 F316 (SEE 90-0042)	N/A	Replacement	No

7. Description of Work:

Replaced the in-core instrumentation adapter hub #94 on Unit 3 reactor closure head. The post assembly from the replaced hub was tack welded to the new replacement hub in accordance with weld record WR3-00-499 and Repair Specification 900500122-04.

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

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

FORM NIS-2 (back)

9. Remarks: SEE 90-0042 reconciles the replacement instrument flange adapter hub which was certified to ASME III-1, 1983 Ed., S.'84 Add.

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

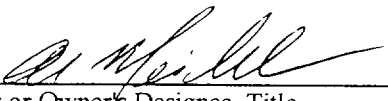
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/19/09 to 02/23/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
MO: 01010264000
Rspec: 010100380-02
PID: 40141CSO3 (G3)
N5: S3-1301-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1974 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" NPS 1500# Piping Inlet Flange	Pullman Inc.	N-7519	N/A	S3-1301-ML-583	1978	Repaired	No

7. Description of Work:

Performed weld build-up repairs to the back side of piping inlet flange ring and neck for 3PSV8418 on line S3-1301-ML-583 in accordance with Repair Specification 010100380-02 and weld records WR3-01-006 and WR3-01-007. Reference: NCR 010100380

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 1/16/01
 Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/05/01 to 01/17/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1867 California
 Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 17, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 01010345000
Rspec: GEN-150
PID: 40112BSO3 (E3)
N5: S3-1204-12
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Safety Injection and Shutdown Cooling
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2-NF, 1974 Ed., S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 3-5	Pacific Scientific	17602	N/A	S3-SI-034-H-003	1981	Replaced	No
Mechanical Snubber PSA 3-5	Pacific Scientific	30750	N/A	RSO-1081-92, P/N 1801106-05	N/A	Replacement	No

7. Description of Work:

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

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

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

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

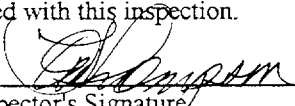
Supervising ASME Codes Engineer

Date: 2/7/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 1/6/01 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770</p> <p>2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012</p> <p>3. Work Performed by: Southern California Edison Company</p> <p>4. Identification of System: Main Steam</p> <p>5. (a) Applicable Construction Code <u>ASME Section III, Class 2, 1974 Edition, No Addenda; Code Case: 1637</u></p> <p>5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>1989 Edition, No Addenda</u></p> | <p>Unit: 3
MO: 01010467001 01010467000
Rspec: ASME SECTION XI DATA-0140, GEN-139 R1
PID: 40141DSO3 (H7)
N5: S3-1301-1</p> <p>Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A</p> |
|--|---|

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
4" 900# Diaphragm Actuator Control Valve	Fisher Controls	6489982	3918	3HV8203	1978	—	Yes
Stem Assembly w/Primary Plug & Pilot Plug	Fisher Controls	6489930, 979, 981, 982	N/A	RSO2-P-0298-82 R1, Mark #NX6912-1	1982	Replacement	Yes
1 1/8" x 36" All-Thread Stud	Nova Machine Products	Ht. #83038, Ht. Code FPY	N/A	RSO-1140-97, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 1/8" - 8 Heavy Hex Nut (2)	Nova Machine Products	Ht. #8098681, Ht. Code C1X	N/A	RSO-0246-95, SA194 Gr.7 (CR-3004-96)	N/A	Replacement	No
1 1/8" - 8 Heavy Hex Nut (2)	Nova Machine Products	Ht. #4806059, Ht. Code RVZ	N/A	RSO-0093-01, SA194 Gr.7 (CR-3004-96)	N/A	Replacement	No
1 1/8" - 8 Heavy Hex Nut (1)	Vitco Nuclear Products	Ht. #25748, Ht. Code CAZ	N/A	RSO-0180-94, SA194 Gr.7 (CR-3004-96)	N/A	Replacement	No
1 1/8" - 8 Heavy Hex Nut (1)	Nova Machine Products	Ht. #65162, Ht. Code X3V	N/A	RSO-1082-95, SA194 Gr.7 (CR-3004-96)	N/A	Replacement	No

7. Description of Work:

Rebuilt the valve located in plant position 3HV8203 (s/n 6489982) by replacing the primary plug, pilot plug and bonnet bolting. (6) each bonnet nuts and (1) each bonnet stud were replaced with in-kind replacements. The replacement stud was cut to a 9" length from all-thread stock with the required markings being transferred to the cut piece in accordance with Repair Specification GEN-139 Revision 1.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 010100559-03

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.
CR-3005-96 reconciles the replacement stud which was certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/08/01 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 01010907000 00050613000
Rspec: ASME SECTION XI DATA-0179,
000300526-05
PID: 40112CSO3 (A5)
N5: S3-1204-34
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
4. Identification of System: Safety Injection and Shutdown Cooling
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1974 Ed., No Add. (Valve); Class 2 (NC), 1974 Ed., S.'74 Add. (Pipe & Fittings); Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda; 1992 Edition, No Add. (NDE and VT-2); Code Case: N-416-1
6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 1500# Y-Type Globe Valve	Target Rock	S/N 6	N/A	3HV9330	1977	Replaced	Yes
2" 1500# Y-Type Globe Valve	Target Rock	S/N 17	N/A	RSO-0133-98, SA182 F316; Model 74R-002	1998	Replacement	Yes

7. Description of Work:

MO 00050613 removed the body to bonnet seal weld on the valve in plant position 3HV9330 and the valve was discovered to have a crack in the the valve seat that was not repairable. MO 01010907 replaced the valve with an in-kind replacement valve in accordance with Repair Specification 000300526-05 and weld record WR3-01-016 and WR3-01-017.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 000300526-03

This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date: 2/7/01

Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 5/17/00 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 01011032000
Rspec: GEN-150
PID: 40141ADO3 (G7)
N5: S3-1305-8
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Condensate
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2-NF, 1974 Edition, S.74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 10-6	Pacific Scientific	17968	N/A	S3-FW-189-H-010B	1991	Replaced	No
Mechanical Snubber PSA 10-6	Pacific Scientific	17961	N/A	RSO-1352-91, P/N 1801103-07	N/A	Replacement	No

7. Description of Work:

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

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

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

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/7/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 1/17/01 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 01011068000
Rspec: 003-01 R1
PID: 40123BSO3
N5: S3-1208-4
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, No Addenda; Code Case: None

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda; 1992 Edition, No Addenda (VT-2); Code Case: N-416-1

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Letdown Heat Exchanger	Ametek Inc.	78828	10783	S31208ME062	1977	Repaired	Yes

7. Description of Work:

Some of the welds that attach the pass partition plates to the internal surface of the channel head of the letdown heat exchanger were cracked and required weld repair. All welding and NDE was performed in accordance with Repair Specification 003-01, Revision 1 and weld record WR3-01-025.

Note: PSE not required due to scope of work.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/18/01 to 02/23/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 01011559000
Rspec: GEN-150
PID: 40123ASOE (F6)
N5: S3-1201-3-10
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class-1 NF, 1974 Ed., S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Mechanical Snubber PSA 1-4	Pacific Scientific	24072	N/A	S3-RC-022-H-008	1983	Replaced	No
Mechanical Snubber PSA 1-4	Pacific Scientific	20682	N/A	RSO-2431-84 R1, P/N 1801102-05 (CR-3005-95)	N/A	Replacement	No
Mechanical Snubber PSA 1-4	Pacific Scientific	3214	N/A	S3-RC-022-H-009	1978	Replaced	No
Mechanical Snubber PSA 1-4	Pacific Scientific	20685	N/A	RSO-2431-84 R1, P/N 1801102-05 (CR-3005-95)	N/A	Replacement	No

7. Description of Work:

The mechanical snubbers were replaced as a preventative maintenance action. The snubber assemblies were visually examined (VT-3) after installation with satisfactory results. The removed snubbers were placed into the snubber rebuild program.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: CR-3005-95 reconciles the replacement snubbers which were certified to ASME III-1-NF, 1977 Edition, W.'79 Addenda; Code Case: 1644-6.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

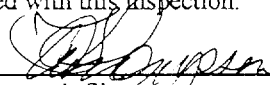
Supervising ASME Codes Engineer

Date: 2/7/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 1/23/01 to 2/8/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date: Feb. 8, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 2/3
MO: 95031589000
Rspec: 154-98
PID: N/A
N5: N/A
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Main Steam
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2 (NC), 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Valve Plug	CCI	S/N 1, Ht. #8080095	N/A	RSO-1375-99, SA182 F11	1999	Repaired	Yes
Valve Plug	CCI	S/N 2, Ht. #8080095	N/A	RSO-1375-99, SA182 F11	1999	Repaired	Yes

7. Description of Work:

The following repair work was performed by the vendor (CCI) for the valve plugs (Ht. #8080095, S/N 1 & S/N 2): Re-machining; NDE (PT) of machined surfaces; Re-hardfacing; PWHT; Final machining and Final PT and Visual examination. Note: No VT-2 required for this work scope.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/22/99 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 19, 2000

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition Summer 1972 Addenda; Code Case: N-474-1
(ASME Section III, NB-5000, 1992 Ed. No Add. used for NDE per Code Case: N-416-1)
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda
6. Identification of Components Repaired or Replaced and Replacement Components:

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2 1/2" SS Round Bar Stock	Nova Machine Products	Ht. #40506, Ht. Code FAL	N/A	RSO-0639-97, SA479 Tp.316L	N/A	Replacement	No
2 1/2" SS Round Bar Stock	Nova Machine Products	Ht. #47703	N/A	RSO-1117-97, SA479 Tp.316L	N/A	Replacement	No
1 3/4" Inconel Round Bar Stock	Coulter Steel & Forge Co.	Ht. #ED84	N/A	RSO-1084-96, SB-166 Alloy N06690	N/A	Replacement	No

7. Description of Work:

The referenced maintenance orders and weld records fabricated nine pressure measurement nozzles per FCN F13553M. M.O. 97070323 performed the welding and M.O. 97070324 performed the machining. Six of the nine nozzles failed radiography or final visual examination and were scrapped. Three of the nozzles were completed. The same heat # numbers of material (#40506) were used on six of the nozzles and the heat # numbers (#47703) were used on the remaining three nozzles. Details of each nozzle are summarized below.

Nozzle Serial#	Weld Record	RT Report#	PT Report#	Current Status
				97070324-0
RS-094-97	WR3-97-359	3RT-077-97 (Failed)	3PT-133-97	Scrapped, failed RT.
RS-095-97	WR3-97-360	N/A	N/A	Scrapped during mach process.
RS-096-97	WR3-97-361	3RT-082-97 (Failed)	3PT-136-97 3PT-173-97 (Failed)	Scrapped, failed RT.
RS-097-97	WR3-97-362	3RT-076-97	3PT-137-97	Scrapped after failed visual exam.
RS-098-97	WR3-97-363	3RT-087-97	3PT-138-97 3PT-182-97	Nozzle installed on 97101708.
RS-099-97	WR3-97-364	3RT-083-97	3PT-139-97 3PT-174-97 3PT-180-97	Nozzle installed on 97110883.
RS-100-97	WR3-97-365	3RT-086-97 (Failed)	3PT-178-97 (Failed)	Scrapped prior to machining process.
RS-101-97	WR3-97-366	N/A	3PT-141-97	Scrapped, visual exam.
RS-102-97	WR3-97-367	3RT-085-97 (Failed)	3PT-148-97 3PT-175-97	Scrapped, failed RT.
RS-103-97	WR3-97-368	3RT-084-97	3PT-151-97 3PT-176-97 3PT-181-97	Nozzle installed on 97101708.

8. Tests Conducted: N/A

Pres: N/A

Temp: N/A

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

FORM NIS-2 (back)

9. Remarks : None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 1/20/00

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 07/05/97 to 01/21/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 1862

California

National Board, State, Province, and Endorsements

Date

Jan 21, 2000

97070324-0

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
MO: 98101825000
Rspec: ASME SECTION XI DATA-0059, GEN-139 R1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
- PID: 40112ASO3 (D7)
N5: S3-1204-22
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, Summer 1975 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
24" Duo Check Valve	TRW Mission	05802	N/A	S31204MU002	1977	---	Yes
1 1/4"-8 Heavy Hex Nuts (10)	Nova Machine Products	Ht. #68395, Ht. Code FSD	N/A	RSO-0027-99, SA194 Gr. 7 (CR-3004-96)	N/A	Replacement	No
1 1/4"-8x 36" All-Thread Studs (4)	Nova Machine Products	Ht. # 69498, Ht. Code LMS	N/A	RSO-1769-98, SA193 Gr. B7 (CR-3005-96)	N/A	Replacement	No

7. Description of Work:

Replaced the flange bolting (10 each nuts and 8 each studs) on the check valve located in plant position S31204MU002. (8) studs were cut to 17" lengths from all-thread material in accordance with GEN-139 Revision 1, with the required markings being transferred to the cut pieces. VT-2 examination was performed and dry boric acid crystals were identified. Operability Assessments 970900643-02 and 990901519-01 were performed and system was accepted as is. Therefore, VT-2 examination (970900643-03) accepted as is in accordance with IWA-5250 (b).

8. Tests Conducted: System Functional Pressure Test

Pressure: NOP

Temp: N/A

See: AR 970900643-03

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 and CR-3005-96 reconciles the replacement bolting which was certified to ASME III-2, 1989 Edition, No Addenda.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/27/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 09/13/99 to 03/27/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 27, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
CWO: 99040562000 01010266000
FCN: F14446M
Rspec: 990302128-03, 990302129-03, 990302130-0
PID: 40111ASO3
N5: S3-1301-1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1971 Edition, S.'71 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Steam Generator	CE	72270-1	22264	S31301ME089P	1977	---	Yes
Instrument Nozzle	SCE	RS-046-97-E	N/A	3PDT0978-1	N/A	Repaired	No
Instrument Nozzle	SCE	208-97	N/A	3PDT0978-2	N/A	Repaired	No
Instrument Nozzle	SCE	211-97	N/A	3PDT0978-4	N/A	Repaired	No

7. Description of Work:

CWO 99040562000 machined the transition area (outside diameter "step") on the Steam Generator instrument nozzles 3PDT0978-1, 3PDT0978-2 and 3PDT0978-4 in accordance with FCN F14446M and Repair Specification 990302129-03 (3PDT0978-1), 990302130-03 (3PDT0978-2) and 990302128-03 (3PDT0978-4). CWO 01010266000 performed PT examinations of the machined surfaces per NCR 990600932 and in accordance with Repair Specifications 990302129-03 (3PT-025-01), 990302130-03 (3PT-062-01) and 990302128-03 (3PT-062-01) with satisfactory results.

8. Tests Conducted: N/A

Pressure: N/A

Temp: N/A

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 04/16/99 to 02/23/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
MO: 99051052000
Rspec: ASME SECTION XI DATA-0516
PID: 40112CSO3 (F3)
N5: S3-1204-11
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1977 Edition, S.'77 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
3" 1500# RTJ Orifice Plate	Permutit Co.	N-4076	N/A	3FE0341	1981	Replaced	Yes
3" 1500# RTJ Orifice Plate	ABB Combustion Engineering	2878	N/A	RSO-1486-00, SA240 304L SS	2000	Replacement	Yes

7. Description of Work:

Replaced the orifice plate on flow element 3FE0341 with an in-kind replacement orifice plate.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 990401629-16

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 2/28/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/04/01 to 03/01/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 1, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
4. Identification of System: Primary Plant Makeup
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, S.'73 Addenda; Code Case: None

Unit: 3
MO: 99080074001 99080074000
Rspec: ASME SECTION XI DATA-0290
PID: 40111CSO3 (G6)
N5: S3-1901-2

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

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 600# Y-Type Globe Valve	Kerotest	SVD1-4	N/A	S31901MU321	1978	—	Yes
Disc	Flowserve	S/N 2, Ht. #8546J	N/A	RSO-1429-00, SA479 316	2000	Replaced	Yes
Disc	Kerotest	AHG3-37	N/A	RSO2-P-2396-83, SA479 316 Stellite Hardface	1983	Replacement	Yes

7. Description of Work:

MO 99080074000 replaced the disc in the valve located in plant position S31901MU321 (valve s/n SVD1-4) with a replacement Flowserve disc (s/n 2, Ht. #8546J), however, the valve failed its LLRT and the MO was revised. MO 99080074001 disassembled the valve and replaced the disc again with a new replacement Kerotest disc (s/n AHG3-37), the valve was reassembled and the VT-2 examination was performed with satisfactory results.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 990800014-03

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

FORM NIS-2 (back)

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

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

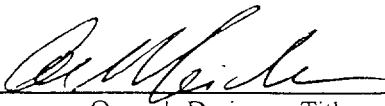
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

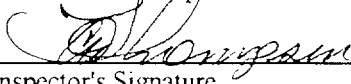
Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 3/15/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/15/01 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

 Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082207000
Rspec: ASME SECTION XI DATA-0173
PID: 40111BSO3 (G7)
N5: S3-1201-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Ed., No Add. (Valve); 1974 Ed., S.'74 Add. (Inlet Bolting); Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser	BS-03210	N/A	3PSV0200	1978	Replaced	Yes
6" x 8" Pressurizer Safety Valve	Dresser	BS-03212	N/A	RSO-2479-00, Tested Spare	1978	Replacement	Yes
2"-8 x 14 1/2" Stud (2)	Nova Machine Products	Ht. #83633	N/A	RSO-0146-99, SA193 Gr. B7	N/A	Replacement	No
2"-8 Heavy Hex Nuts (2)	Nova Machine Products	Ht. #95335, Ht. Code FHZ	N/A	RSO-0904-97, SA194 Gr. 7	N/A	Replacement	No
2"-8 Heavy Hex Nuts (2)	Nova Machine Products	Ht. #78203, Ht. Code JBX	N/A	RSO-0056-99, SA194 Gr. 7	N/A	Replacement	No

7. Description of Work:

The pressurizer safety valve was replaced for preventative maintenance action with a set-point tested spare valve. During installation 2 inlet studs and 4 inlet nuts were also replaced. A VT-1 examination was performed on the replacement flange bolting with satisfactory results. A VT-3 examination of the internal surface of the valve body was performed with satisfactory results (Reference: NCR 001201010). The removed valve was placed into the rebuild program.

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

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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


CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A


Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 3/29/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 03/03/00 to 03/29/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

 Commissions 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 29, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082223000
Rspec: ASME SECTION XI DATA-0185
PID: 40141CDSO3 (G7)
N5: S3-1301-3
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Main Steam
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0037	N/A	3PSV8401	1984	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0028	N/A	RSO-2465-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr. 7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8401 (s/n N58737-01-0037) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0028) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011492.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/15/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/04/00 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082254000
Rspec: ASME SECTION XI DATA-0173
PID: 40111BSO3 (G5)
N5: S3-1201-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Reactor Coolant
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1974 Edition, No Addenda, Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 8" Pressurizer Safety Valve	Dresser	BS-03211	N/A	3PSV0201	1978	Replaced	Yes
6" x 8" Pressurizer Safety Valve	Dresser	BU-06253	N/A	RSO-2479-00, Tested Spare	1980	Replacement	Yes

7. Description of Work:

The pressurizer safety valve was replaced for preventative maintenance action with a set-point tested spare valve. A VT-1 examination was performed on the existing inlet flange bolting with satisfactory results. A VT-3 examination of the internal surface of the valve body was performed with satisfactory results. The removed valve was placed into the rebuild program.

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

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/23/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 03/03/00 to 03/24/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 26, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082277000
Rspec: GEN-106 R2
PID: 40111ASO3
N5: S3-1201-3
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
4. Identification of System: Reactor Coolant
Authorization No: N/A
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 1, 1980 Edition, Summer 1982 Addenda; Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0561	N/A	S31201MP003	1978	---	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1659057-6	1174	RSO-2779-86, SO23-CART-#24, Rebuild MO 01010320	1986	Replaced	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1659057-12	1220	RSO-2100-88, SO23-CART-#26	1986	Replacement	Yes

7. Description of Work:

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

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

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/09/00 to 02/23/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

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

Unit: 3
MO: 99082289000
Rspec: GEN-106 R2
PID: 40111ASO3
N5: S3-1201-3

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012

3. Work Performed by: Southern California Edison Company

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

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code: ASME Section III, Class 1, 1980 Edition Summer 1982 Addenda; Code Case: None

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

6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
36" Reactor Coolant Pump	Byron Jackson	701-N-0562	N/A	S31201MP004	1979	---	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1714880-3	1172	RSO-3476-86, SO23-CART-#22, Rebuild MO 01010321	1986	Replaced	Yes
RCP Pump Mechanical Seal	Bingham Willamette	1714880-5	1165	RSO-2779-86, SO23-CART-#15	1986	Replacement	Yes

7. Description of Work:

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

8. Tests Conducted: System Leakage Pressure Test

Pressure: NOP

Temp: NOT

VT-2 performed per Procedure SO23-XVII-3.1.1

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/24/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/09/00 to 02/23/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082290000
Rspec: ASME SECTION XI DATA-0586
PID: 40123BSO3 (C6)
N5: S3-1208-4
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, No Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
Letdown Heat Exchanger	Ametek Inc.	78828	10783	S31208ME062	1977	---	Yes
1" x 8 1/2" All-Thread Stud (28)	Nova Machine Products	Ht. #69463, Ht. Code RX	N/A	RSO-0604-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1"- 8 Heavy Hex Nut (56)	Allied Nut & Bolt Co. Inc.	Ht. #090309, Trace Code 047	N/A	RSO-1237-95, SA194 2H (CR-3005-00)	N/A	Replacement	No

7. Description of Work:

The letdown heat exchanger manway cover studs (28) each and nuts (56) each were replaced with in-kind replacements.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 001002311-04

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

FORM NIS-2 (back)

9. Remarks: CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Addenda; CR-3005-00 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Addenda.

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

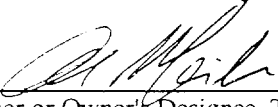
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 2/28/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/04/01 to 03/01/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 1, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082291000
Rspec: ASME SECTION XI DATA-0188
PID: 40141DSO3 (G-5)
N5: S3-1301-1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Main Steam
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0004	N/A	3PSV8404	1976	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0025	N/A	RSO-2214-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8404 (s/n N58737-01-0004) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0025) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011636.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 2/22/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/03/00 to 03/01/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

March 1, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082300000
Rspec: ASME SECTION XI DATA-0189
PID: 40141DSO3 G-5
N5: S3-1301-1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Main Steam
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0007	N/A	3PSV8405	1976	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0032	N/A	RSO-2465-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8405 (s/n N58737-01-0007) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0032) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011899.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/15/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/03/00 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082330000
Rspec: ASME SECTION XI DATA-0187
PID: 40141CSO3 (G-6)
N5: S3-1301-1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
3. Work Performed by: Southern California Edison Company
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0020	N/A	3PSV8412	1977	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0029	N/A	RSO-2465-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (4)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (8)	Nova Machine Products	Ht. #96161, Ht. Code LUW	N/A	RSO-0234-99, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8412 (s/n N58737-01-0020) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0029) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011905.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatn No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/15/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/03/00 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99082335000
Rspec: ASME SECTION XI DATA-0188
PID: 40141CSO3 G-5
N5: S3-1301-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
Type Code Symbol Stamp: N/A
3. Work Performed by: Southern California Edison Company
Authorization No: N/A
4. Identification of System: Main Steam
Expiration Date: N/A
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0001	N/A	3PSV8413	1976	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0022	N/A	RSO-2465-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8413 (s/n N58737-01-0001) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0022) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011923.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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


CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

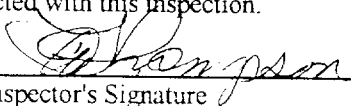
Signed: 
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/08/00 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature 

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
- Unit: 3
MO: 99082350000
Rspec: ASME SECTION XI DATA-0193
PID: 40141CDSO3 (G3)
N5: S3-1301-2
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
- Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0038	N/A	3PSV8418	1984	Replaced	Yes
6" x 10" Main Steam Safety Valve	Crosby Valve & Gage	N58737-01-0033	N/A	RSO-2465-00	1977	Replacement	Yes
1 3/8" x 9" Inlet Stud (12)	Nova Machine Products	Ht. #28007	N/A	RSO-2485-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"-8 Heavy Hex Nut (12)	Nova Machine Products	Ht. Code QXD	N/A	RSO-0409-00, SA194 Gr.7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

The main steam safety valve located in plant position 3PSV8418 (s/n N58737-01-0038) was replaced as a scheduled preventative maintenance action with a spare valve (s/n N58737-01-0033) which had been returned to the vendor for rework and testing. The inlet bolting was also replaced. (12) each studs and (12) each nuts were replaced (the studs were manufactured on MO 99050737). The removed valve was placed into the rebuild program to be rebuilt under MO 00011925.

8. Tests Conducted: System Inservice Pressure Test

Pressure: NOP

Temp: N/A

See: AR 000300903-26

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.;
CR-3005-96 reconciles the replacement studs which were certified to ASME III-2, 1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Owner or Owner's Designee, Title

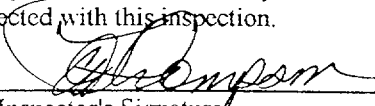
Supervising ASME Codes Engineer

Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 02/03/00 to 03/19/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99083059000 00120613000
Rspec: ASME SECTION XI DATA-0180, GEN-158
PID: 40112DSO3 (F4)
N5: S3-1204-18
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Safety Injection and Shutdown Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, No Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
8" 1500# Globe Valve	Target Rock	74R-008-8	N/A	3HV9328	1977	---	Yes
Disc	Target Rock	S/N 17	N/A	RSO-1689-91, SA182 F347	1991	Replacement	Yes

7. Description of Work:

MO 99083059 replaced the valve disc in the valve located in plant position 3HV9328 (s/n 74R-008-8) with an in-kind replacement disc. MO 00120613 removed and restored the body to bonnet seal weld in accordance with Repair Specification GEN-158. Post weld NDE examination (3PT-041-01) was performed on the seal weld with satisfactory results.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 990801239-07

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 3/23/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 01/12/01 to 03/26/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 26, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99091641002 99091641001
FCN: F21249M, F21259M, F21250M, F21524M
Rspec: 990901067-12, 990901067-17
PID: 40124BSO3 (G2)
N5: S3-1208-5
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code ASME Section III, Class 2 (NC), 1971 Ed., S.'73 Add. (Valve); Class 2 (NC), 1974 Ed., S.'74 Add. (Pipe and installation); Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda; 1992 Ed., No Add. (NDE & VT-2); Code Case: N-416-1
6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 1500# Y-Type Check Valve	Kerotest	MA8-16	N/A	S31208MU067	1976	Replaced	Yes
2" 1513# Y-Type Check Valve	BW/IP International	97ZV1146	N/A	RSO-0464-98, SA182 F316	1998	Replacement	Yes

7. Description of Work:

MO 99091641001 replaced the Kerotest check valve (s/n MA8-16) in plant position S31208MU067 with a BWIP check valve (s/n 97ZV1146). The valve came from the manufacturer with the ends machined for a "J" bevel weld joint design and required that the ends be re-machined and the new surface PT examined. Additionally, valve replacement required the downstream pipe nipple between valves S31208MU067 and S31208MU068 be cut and beveled. The replacement valve installation was performed in accordance with Repair Specification 990901067-12 and weld records WR3-00-099 Rev. 0 and WR3-00-100. MO 99091641002 repaired the weld defect to weld "BH" as noted on NDE report 3RT-003-01, in accordance with Repair Specification 990901067-17 and weld record WR3-00-099 Rev. 1; The replacement BWIP valve body-to-bonnet sealweld was performed in accordance with weld record WR3-00-251 and Repair Specification 990901067-12.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT
See: AR 990901067-13

This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.

FORM NIS-2 (back)

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

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

Signed: [Signature] Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 11/28/00 to 02/03/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 1862 California
Inspector's Signature National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

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

Unit: 3
MO: 99100231000
Rspec: ASME SECTION XI DATA-0460
P&ID: 40124BSO3 (H2)
N-5: S3-1208-5

2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128

3. Work Performed by: Southern California Edison Company

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

4. Identification of System: Chemical and Volume Control

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

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

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

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0013	N/A	3PSV9225	1985	Replaced	Yes
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0007	N/A	Rebuild MO 97121818	1984	Replacement	Yes

7. Description of Work:

Replaced the relief valve S/N N59380-00-0013 located in plant position 3PSV9225 with a tested and rebuilt spare relief valve S/N N59380-00-0007 that was rebuilt under MO 97121818. Note: Removed valve to be rebuilt under MO 99100415.

8. Tests Conducted: System Functional Pressure Test

Pressure: NOP

Temp: N/A

See: AR 991000128-02

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

FORM NIS-2 (back)

9. Remarks : None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 12/1/99

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/04/99 to 12/03/99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862

California

National Board, State, Province, and Endorsements

Date Dec. 3, 1999

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-0128
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control
- Unit: 3
MO: 99100503000
Rspec: ASME SECTION XI DATA-0460
P&ID: 40124BSO3 (E2)
N-5: S3-1208-5
- 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; Code Case: None
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Edition, No Addenda

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

Name of Component	Name Of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0006	N/A	3PSV9226	1978	Replaced	Yes
1 1/2" x 2" Nozzle Type Relief Valve	Crosby Valve & Gage	N59380-00-0012	N/A	025-83508, (Rebuilt on MO 97121811)	1985	Replacement	Yes

7. Description of Work:

Replaced the relief valve located in plant position 3PSV9226 with an in-kind rebuilt and tested spare. The replacement spare was rebuilt and tested under MO 97121811. The removed valve to be rebuilt under MO 99110008.

8. Tests Conducted: System Functional Pressure Test

Pressure: NOP

Temp: N/A

See: AR 991000316-02

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

FORM NIS-2 (back)

9. Remarks : None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Date: 7/17/00

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/13/99 to 01/18/00, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date 01/18/00

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99100779001
FCN: F21252M, F21253M, F21260M, F21525M
Rspec: 991000212-08
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
PID: 40124BSO3 (D2)
N5: S3-1208-5
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code ASME Section III, Class 2 (NC), 1971 Ed., S.'73 Add. (Valve); Class 2 (NC), 1974 Ed., S.'74 Add. (Pipe and installation); Code Case: None
5. (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1989 Editon, No Addenda; 1992 Edition, No Addenda (VT-2); Code Case: N-416-1
6. Identification of Components Repaired or Replaced and Replacement Component

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 1500# Y-Type Check Valve	Kerotest	MA8-20	N/A	S31208MU069	1976	Replaced	Yes
2" 1513# Y-Type Check Valve	BW/IP International	97ZV1144	N/A	RSO-0337-98, SA182 F316	1998	Replacement	Yes

7. Description of Work:

Replaced the Kerotest check valve (s/n MA8-20) in plant position S31208MU069 with a BWIP check valve (s/n 97ZV1144). The valve came from the manufacturer with the ends machined for a "J" bevel weld joint design and required that the ends be re-machined and the new surface PT examined. Additionally, valve replacement required the downstream pipe nipple between valves S31208MU069 and S31208MU070 cut and beveled. The replacement valve installation was performed in accordance with Repair Specification 991000212-08 and weld records WR3-00-252 and WR3-00-253, and the replacement BWIP valve body-to-bonnet sealweld was performed in accordance with weld record WR3-00-255.

8. Tests Conducted: System Leakage Pressure Test Pressure: NOP Temp: NOT
See: AR 991000212-09

This test was performed in lieu of a hydrostatic pressure test as allowed under Code Case N-416-1.

FORM NIS-2 (back)

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

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

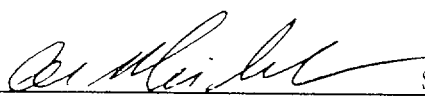
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

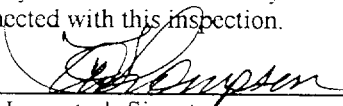
Expiration Date: N/A

Signed:  Supervising ASME Codes Engineer Date: 2/22/01
Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 11/30/00 to 02/23/01 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date Feb. 23, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99110546000
Rspec: ASME SECTION XI DATA-0068
PID: 40124BSO3 (C2)
N5: S3-1208-5
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, S.'73 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 1500# Y-Type Globe Valve	Kerotest	OCA14-22	N/A	S31208MU018	1977	---	Yes
Disc	Flowserve Corp.	S/N 10, Ht. #8546J	N/A	RSO-1429-00, SA479 316 Stellite Hardface	2000	Replacement	Yes
Bonnet	Kerotest	AXR10-2	N/A	RSO-1819-93, SA479 316	N/A	Replacement	Yes

7. Description of Work:

Replaced the disc and bonnet in the valve located in plant position S31208MU018 (s/n OCA14-22) with in-kind replacements.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 991100228-02

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

FORM NIS-2 (back)

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

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

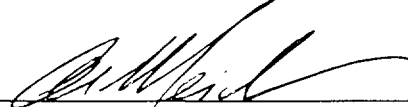
CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizatoin No: N/A

Expiration Date: N/A

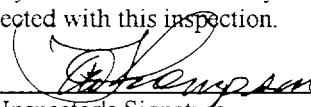
Signed: 
Owner or Owner's Designee, Title

Supervising ASME Codes Engineer Date: 3/23/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/13/01 to 03/26/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 26, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Unit: 3
MO: 99110550001 01011033000, 95031589000
Rspec: ASME SECTION XI DATA-0142, GEN-139 R1, 154-98
PID: 40141DSO3 (E6)
N5: S3-1301-1
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A
4. Identification of System: Main Steam
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition, S.'74 Addenda; Code Case: None

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
8" 900# Drag Valve	B&W/CCI	18447-3-3	N/A	3HV8419	1979	---	Yes
Valve Plug	CCI	S/N 1; Ht. #8080095	N/A	RSO-1375-99, SA182 F11, Rebuild MO 95031589	1999	Replacement	Yes
1 3/8" x 36" All-Thread Stud (4)	Nova Machine Products	Ht. #99227-32-1, Trace Code TVX	N/A	RSO-2353-00, SA193 B7 (CR-3005-96)	N/A	Replacement	No
1 3/8"- 8 Heavy Hex Nuts (14)	Nova Machine Products	Ht. #10150, Ht. Code RKW	N/A	RSO-0916-00, SA194 7 (CR-3004-96, SEE-92-0065)	N/A	Replacement	No

7. Description of Work:

Replaced the valve plug and bonnet bolting in the valve located in plant position 3HV8419 (s/n 18447-3-3) with in-kind replacements. (14) each bonnet nuts were replaced and under MO 01011033000 (14) each studs were cut to 8 5/16" lengths from all-thread stock with the required markings being transferred to the cut pieces in accordance with Repair Specification GEN-139 R1. Replacement plug assembly was refurbished by vendor (CCI) in accordance with MO 95031589000 and Repair Specification 154-98.

8. Tests Conducted: System Inservice Pressure Test Pressure: NOP Temp: N/A
See: AR 991100389-04

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

FORM NIS-2 (back)

9. Remarks: CR-3004-96 reconciles the replacement nuts which were certified to ASME III-2, 1989 Ed., No Add.
(Ref. SEE-92-0065); CR-3005-96 reconciles the replacement studs which were certified to ASME III-2,
1989 Ed., No Add.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorization No: N/A

Expiration Date: N/A

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

Supervising ASME Codes Engineer Date: 3/15/01

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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 12/27/00 to 03/19/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

Commissions 1862 California
National Board, State, Province, and Endorsements

Date March 19, 2001

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
2. Plant: San Onofre Nuclear Generating Station
San Clemente, California 92674-012
3. Work Performed by: Southern California Edison Company
4. Identification of System: Chemical and Volume Control
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1971 Edition, S.'73 Addenda; Code Case: None

Unit: 3
MO: 99111396000
Rspec: ASME SECTION XI DATA-0293
PID: 40123BSO3 (D2)
N5: S3-1208-11
Type Code Symbol Stamp: N/A
Authorization No: N/A
Expiration Date: N/A

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

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped Yes/No
2" 600# Check Valve	Valcor	S/N 5	N/A	S31208MU172	1985	---	Yes
Disc	Valcor	S/N LP1	N/A	RSO-1977-93, SA479 316	1993	Replacement	Yes

7. Description of Work:

Replaced the valve disc on the valve in plant position S31208MU172 (s/n 5) with an in-kind replacement disc to correct leak by.

8. Tests Conducted: System Functional Pressure Test Pressure: NOP Temp: N/A
See: AR 991101245-02

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

FORM NIS-2 (back)

9. Remarks: None.

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

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

Certificate of Authorizaton No: N/A

Expiration Date: N/A

Signed: 

Supervising ASME Codes Engineer

Date:

3/23/01

Owner or Owner's Designee, Title

CERTIFICATE OF INSPECTION

I, the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California, and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 03/03/00 to 03/26/01, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions

1862

California

National Board, State, Province, and Endorsements

Date

March 26, 2001