



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-8064**

September 22, 2000

Harold B. Ray, Executive Vice President
Southern California Edison Co.
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

**SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION - NRC INSPECTION
REPORT NO. 50-361/00-09; 50-362/00-09**

Dear Mr. Ray:

On August 9, 2000, the NRC completed a team inspection at the San Onofre Nuclear Generating Station, Units 2 and 3, facilities. The enclosed report presents the results of this inspection. On July 21, 2000, we discussed the preliminary results of the onsite inspection with Mr. A. Scherer, Manager, Nuclear Oversight and Regulatory Affairs Division, and with other members of your staff. On August 10, 2000, we conducted a telephonic exit meeting with Mr. G. Cook and other members of your staff, to inform your staff of the results of the in-office review following the team's departure from the site.

The inspection was an examination of activities conducted under your license as they relate to identification and resolution of problems, compliance with the Commission's rules and regulations and compliance with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observation of activities, and interviews with personnel.

Based on the results of the inspection, we concluded that your program effectively identified and resolved conditions adverse to quality in that the team did not identify any issues that resulted in the operability of safety-related or risk-significant plant equipment being questioned. Also, we concluded that your personnel communicated an acceptable level of responsibility in identifying and entering safety issues into the corrective action program.

There was one green finding identified during this inspection that involved physical security associated with a breach in the protected area boundary. This finding was determined to be a violation of NRC requirements. This violation is being treated as a Non-Cited Violation consistent with Section VI.A of the NRC Enforcement Policy. If you contest this Non-Cited Violation you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the San Onofre Nuclear Generating Station, Units 2 and 3, facilities.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

John L. Pellet, Chief
Operations Branch
Division of Reactor Safety

Docket Nos.: 50-361; 50-362
License Nos.: NPF-10; NPF-15

Enclosures:
NRC Inspection Report No.
50-361/00-09; 50-362/00-09

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SOE:OB	SOE:OB	OE:OB	SRI:PBD	RI:PBC
TFStetka/lmb	SLMcCrory	GEWerner	JHMoorman	JGKramer
/RA/	/RA/	/RA/	/RA/ E	/RA/ E
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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-361; 50-362
License Nos.: NPF-10; NPF-15
Report No.: 50-361/00-09; 50-362/00-09
Licensee: Southern California Edison Co.
Facility: San Onofre Nuclear Generating Station, Units 2 and 3
Location: 5000 S. Pacific Coast Hwy.
San Clemente, California
Dates: July 17 through August 10, 2000
Inspectors: T. Stetka, Senior Operations Engineer, Operations Branch
S. McCrory, Senior Operations Engineer, Operations Branch
G. Werner, Operations Engineer, Operations Branch
J. Moorman, Senior Resident Inspector, Projects Branch D
J. Kramer, Resident Inspector, Projects Branch C

Approved By: John L. Pellet, Chief
Operations Branch
Division of Reactor Safety

ATTACHMENTS:

Attachment 1: Supplemental Information
Attachment 2: Material Requested
Attachment 3: NRC's Revised Reactor Oversight Process

SUMMARY OF FINDINGS

IR 05000361-00-09; 05000362-00-09; on 07/17-08/10/2000; San Onofre Nuclear Generating Station, Units 2 and 3; Physical Protection; Annual baseline inspection of the Identification and Resolution of Problems.

The inspection was conducted by three regional operations inspectors and two resident inspectors. This inspection identified one green issue, which was a Non-Cited Violation. The significance of issues is indicated by their color (no color, green, white, yellow, red) and was determined by the Significance Determination Process.

Identification and Resolution of Problems:

- The licensee was effective at identifying problems and entering these problems into the corrective action program. The licensee's self-assessments were found to be effective, as evidenced by the identification of a deficiency involving the corrective action followup process, which was also identified by the team. The licensee effectively prioritized the extent to which issues would be evaluated consistent with their safety and risk significance and established appropriate schedules for implementation of corrective actions. With the exception of two examples, the licensee implemented corrective actions that were timely and effective. The team concluded that these two examples were isolated and were not indicative of current licensee performance in the corrective action area.

Cornerstone: Physical Protection

- Green. The licensee created a breach of the protected area boundary during the removal of a Unit 1 turbine plant cooling water system spool piece and failed to identify and post the breached boundary with a security guard for 6 days. This violation of the physical security plan is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Action Request 991100485.

This issue was determined to be of very low risk significance because of the difficulty for an individual to enter the protected area through the breached pathway. Even though the issue was a vulnerability of a safeguards system, using the physical protection significance determination process, the team characterized the issue as green because it did not involve an intrusion and there were no additional similar findings in the past four quarters (Section 4OA3).

Report Details

4. OTHER ACTIVITIES

40A2 Identification and Resolution of Problems

1. Effectiveness of Problem Identification

a. Inspection Scope

The team reviewed items that pertained to the seven cornerstones of the reactor safety, radiation safety, and safeguards strategic performance areas to determine if problems were appropriately being identified, characterized, and entered into the corrective action program. Approximately 198 licensee records were reviewed, which included selected action requests and audits completed in the time period from June 1999 to June 2000. A listing of the specific documents reviewed during the inspection is attached to the report.

b. Issues and Findings

Based on a review of the licensee's records, the team concluded that the licensee effectively identified problems. The team identified no findings related to the applicable attributes of Inspection Procedure 71152, "Identification and Resolution of Problems," Section 03.02.c, for the area of problem identification. One minor example of a missed opportunity to identify an issue was identified as discussed below.

The team reviewed Root Cause Evaluation 99-001, "SONGS 3 Plant Trips Due to Spurious Operation of Feedwater Regulating Valves FV1111 and FV1121." Attachment 5 to this evaluation was Failure Analysis Report 99-17, "Positioner Failure on Feedwater Regulating Valve 3FV1111." Attachment 5 documented the root cause of the positioner failure as a combination of the lack of spring back of the positioner control diaphragm and the plugging of a supply air nozzle. During this root cause investigation, the licensee reviewed the results from the baseline air-operated valve diagnostic testing conducted in 1997. This data showed a difference between positioner demand and valve position that was indicative of a problem with the positioner. Although at the time of Root Cause Evaluation 99-001, the licensee realized that this data indicated a significant degradation of the positioner, this significance was not recognized in 1997. As a result, an action request was not initiated to address the problem. The team noted that the requirements for issuing an action request in the licensee's corrective action program were based on personnel recognizing an issue or concern as a problem. The team noted that the personnel error to identify the positioner baseline data differences as a problem and to issue an action request in 1997 allowed a degraded condition, which eventually resulted in a plant trip in 1999, to continue. However, based on the team's screening of items that were not identified as concerns by the licensee and discussions with personnel involved in the issue identification, the team did not identify any similar occurrences. Therefore, the team concluded that this example was not indicative of current performance in the corrective action program area.

2. Prioritization and Evaluation of Issues

a. Inspection Scope

The team reviewed approximately 198 licensee records that included action requests and audits to verify that identified issues were appropriately characterized, an appropriate analysis of the cause of the problem was performed for significant conditions adverse to quality, and the risk associated with combinations of issues was appropriately considered. In addition, the team reviewed the licensee's evaluation of selected industry experience information to assess if issues applicable to the San Onofre Nuclear Generating Station were appropriately addressed. Documents reviewed included operating event reports and NRC and vendor generic notices. Information that the team reviewed was selected in the time period from June 1999 to June 2000. A listing of the specific documents reviewed during the inspection is attached to the report.

b. Issues and Findings

Based on a review of the licensee's records, the team concluded that the licensee effectively prioritized and evaluated issues. The team identified no findings related to the applicable attributes of Inspection Procedure 71152, "Identification and Resolution of Problems," Section 03.02.c, for the areas of prioritization and evaluation of issues.

3. Effectiveness of Corrective Actions

a. Inspection Scope

The team reviewed approximately 198 licensee records that included action requests and audits to verify that corrective actions commensurate with the issues were identified and implemented in a timely manner, including corrective actions to address common cause or generic concerns. Information that the inspectors reviewed was selected in the time period from June 1999 to June 2000. A listing of the specific documents reviewed during the inspection is attached to the report.

b. Issues and Findings

Based on a review of the licensee's records, the team concluded that the licensee implemented effective corrective actions. The team identified no findings related to the applicable attributes of Inspection Procedure 71152, "Identification and Resolution of Problems," Section 03.02.c, for the area of effectiveness of corrective actions. Two minor examples of incomplete corrective action assignment followup activities were identified, as discussed below. The team concluded that these examples were not indicative of the licensee's performance in this area.

The licensee used a corrective action followup process as a second barrier to ensure that corrective action assignments were implemented. This corrective action followup process was mandatory for root-cause evaluations and optional for apparent-cause evaluations as defined by the licensee. The process also involved two levels of followup, an interim corrective action and a final corrective action followup. The interim corrective action followup was used if some of the corrective actions were long term in order to provide assurance that shorter-term corrective actions were properly completed.

- As documented in NRC Inspection Report 50-361;-362/99-19, the licensee wrote Action Request 000100155 to address a failure to perform a barrier analysis for the replacement of a leaking discharge piping flange gasket on a saltwater cooling pump. The team reviewed the closed interim corrective action followup assignment for Action Request 000100155 and identified that the assignment inferred that the corrective actions were effective when, in actuality, the corrective actions had not been completely identified or implemented. The licensee indicated that the corrective action followup also identified that the corrective actions were not complete, but, due to an administrative error, the corrective action followup assignment was closed instead of canceled. The licensee indicated that the assignment should have been canceled since it was not possible to access corrective actions that were not complete. If the assignment had been canceled, the assignment would have shown to still be open, thus, requiring additional action. The licensee corrected the deficiency by canceling the corrective action followup assignment and initiated a trend assignment in Action Request 000100155 to document the deficiency.
- During a review of Root Cause Evaluation 99-001, which addressed two Unit 3 plant trips that occurred on May 13 and 15, 1999, while conducting plant startup after the Cycle 10 refueling outage, the team noted some corrective action process problems. This evaluation contained a long-term corrective action to replace the valve positioner on each feedwater regulating valve and regulating bypass valve in subsequent refueling outages. The corrective action also included the requirement that each valve undergo air-operated valve diagnostic testing after positioner replacement. The diagnostic testing requirement was inadvertently omitted as an action assignment. However, the team noted that an unrelated action request resulted in performance of the required air-operated valve diagnostic testing.

To ensure that the long-term corrective actions were tracked for completion, an interim corrective action followup assignment was initiated for Root Cause Evaluation 99-001. However, during a review of this corrective action followup assignment, the team determined that the interim corrective action followup was incomplete because it did not identify the failure to include the action assignment for air-operated valve diagnostic testing.

In each of these two examples, the corrective action followup process failed to provide the intended second barrier to ensure that corrective action assignments were properly completed. The team noted that these two corrective action followup assignment deficiencies were similar to corrective action followup issues identified by the licensee and documented in Audit SCES-016-00, "Corrective Action Program Audit," dated July 17, 2000. As a result of these findings, the licensee initiated an apparent cause evaluation as Assignment 10 to Action Request 000600022 to further evaluate corrective action program followup performance issues.

4. Effectiveness of Licensee Audits and Assessments

a. Inspection Scope

The team reviewed four licensee audits performed since June 1999. The review was conducted to determine whether the findings from the audits were appropriately captured in action requests. This review did not include a determination of the management and adequacy of the licensee's audit program. A listing of the audits reviewed during the inspection is attached to the report.

b. Issues and Findings

There were no findings identified during this inspection. The findings from the four audits reviewed were found to be appropriately captured in action requests.

5. Assessment of Safety Conscious Work Environment

a. Inspection Scope

The team interviewed 3 managers, 3 supervisors, and 10 engineers regarding the licensee's employee concerns program. These interviews assessed whether conditions existed that would challenge the establishment of a safety conscious work environment. This review did not include a determination of the adequacy of the licensee's employee concerns program.

b. Issues and Findings

There were no findings during this inspection. The team concluded, based on information collected from interviews with 16 licensee personnel, that these employees were willing to identify issues and accepted the responsibility to proactively identify and enter safety issues into the corrective action program.

40A3 Event Follow-up

1. (Closed) Licensee Event Report 362/2000-001-00: Inoperable Post Accident Monitoring Instrument. This licensee event report was a minor issue and was closed.

2. (Closed) Licensee Event Report 206; 361; -362/1999-002-00: Inadvertent Breach in Protected Area.

On November 2, 1999, as part of the decommissioning activities, the licensee removed a spool piece from the Unit 1 turbine plant cooling water system and inadvertently created a pathway from the ocean to the opening in the turbine plant cooling water system piping. This pathway was considered to be a breach of the protected area boundary. On November 8, the licensee identified the breach and posted a security guard at the opening to comply with the physical security plan. The licensee initiated Action Request 991100485 as a result of the event. The team reviewed the planned and completed corrective actions addressed in the action request and licensee event report and concluded that the actions were acceptable. However, the team considered the breach to be a violation of the licensee's physical security plan.

Revision 62, Section 4.1.2, of the physical security plan, stated, in part, that all openings in the protected area barrier were either less than 96 square inches or greater than 96 square inches, but with one dimension 6 inches or less. If any opening in the protected area barrier was greater than 96 square inches and had one dimension that was greater than 6 inches, it would be considered to be a reduction in the effectiveness of the protected area barrier. Since the opening was created due to ongoing decommissioning work on Unit 1, the opening was considered to be a temporary reduction in the effectiveness of the physical barrier. Section 4.1.4 of the plan stated, in part, that in the event of a temporary reduction in the effectiveness of a physical barrier at the protected area perimeter, compensatory measures were required to ensure that the overall effectiveness of the barrier was not degraded. If a protected area barrier was breached, an armed security officer would be required to be posted as a compensatory measure. Contrary to the above, on November 2, the licensee created a protected area opening greater than 96 square inches with one dimension greater than 6 inches, which caused a reduction in the effectiveness of the protected area perimeter and failed to take compensatory measures until November 8, when the breach was identified. This violation of the physical security plan is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy (50-206; -361; -362/0009-01). This violation is in the licensee's corrective action program as Action Request 991100485. The team considered this issue to be of very low risk significance because of the difficulty for an individual to enter the protected area through the breached pathway. Using the physical protection significance determination process, the team determined that even though the issue was a vulnerability of a safeguards system, it did not involve an intrusion and there were no additional similar findings involving a protected area breach in the past four quarters (Green).

40A6 Meetings

a. Exit Meeting Summary

The team debriefed Mr. A. Scherer, Manager, Nuclear Oversight and Regulatory Affairs Division, and other members of the licensee's management staff on the preliminary inspection findings at the conclusion of the onsite inspection on July 21, 2000. The licensee's management acknowledged the findings presented.

A telephonic exit meeting was held on August 10, 2000, with Mr. G. Cook, Supervisor, Regulatory Compliance, and Mr. M. Flannery, Supervisor, Access Authorization, during which the team leader characterized the results of the in-office review following the team's departure from the site.

The team asked licensee personnel whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

D. Frey, Action Request Administrator, Maintenance
C. McAndrews, Project Manager, Programs and Assessments
R. Clark, Manager, Quality Engineering and Programs, Nuclear Oversight and Regulatory Affairs Division (NORAD)
D. Powers, Supervisor, Mechanical
G. Buxton, System Engineer, Reactor Coolant System
P. Wattson, Supervisor of Technical Programs, Station Technical
M. McBrearty, Compliance Engineer, NORAD
D. Stickney, Manager, Nuclear Engineering Design
J. Hedrick, Manager of Support Services in Maintenance
D. Russell, Self Assessment Coordinator
L. Bosch, System Engineer
W. Marsh, Senior Air-Operated Valve Engineer
C. Schmidt, System Engineer
G. Shelton, System Engineer
D. Stickney, Manager, Controls and Electrical, Nuclear Engineering Design
K. Wood, System Engineer

ITEMS OPENED AND CLOSED

Opened and Closed

50-206; -361;-362/2000009-01 NCV Inadvertent Breach in Protected Area

Closed

50-362/2000-001-00 LER Inoperable Post Accident Monitoring Instrument
50-206; -361; -362/1999-002-00 LER Inadvertent Breach in Protected Area

PARTIAL LIST OF DOCUMENTS REVIEWED

PROCEDURES

NUMBER	TITLE	REVISION
SO123-XX-1	Action Request/Maintenance Order Initiation and Processing	12
SO123-XII-2.21	Nuclear Safety Group Functions and Responsibilities	4
SO123-CA-1	Corrective Action Program	3

SO123-XV-5.1	Temporary Modification Control	4
SO123-XV-6	Fitness for Duty: SONGS Continual Behavior Observation Program	6
SO123-XV-13	1410 Access Authorization Process For Protected And Vital Area Entry	6
SO123-XV-50	Corrective Action Process	3
SO123-XV-50.39	Cause Evaluation Standards and Methods	2
SO123-XV-52	Operability Assessments and Reportability Evaluations	0
SO123-XX-2	Maintenance Order/Construction Work Order Inter-disciplinary Review and Approval	1
SO123-XV-5	Nonconforming Material, Parts, or Components	11
SO123-IV-5.3.3	Security Processing Facility Search and Inspection	6
SO123-IV-4.4	Security Lock and Key Control	5
SO123-XX-5	Work Authorizations	8
SO23-I-8.47	CREACUS - Control Room Damper Inspections	3
SO23-5-1.8.1	Shutdown Nuclear Safety	7
SO23-1-3.1	Emergency Chilled Water System Operation	12
SO23-15-50.A2	CEDMCS Timer Failure	6
SO23-3-2.19	Control Element Drive Mechanism Control System (CEDMCS) Operation	14
SO23-2-13	Diesel Generator Operation	19
SO23-XXVI-14.18	FME Control for Steam Generator Secondary Side Work Activities	0
SO123-0-7	Operator Training Responsibilities	7TCN1
SO123-0-20	Use of Procedures	10
SO123-0-23	Control of System Alignments	9
SO123-IT-1	Infrequently Performed Tests Or Evolutions Control Program	5TCN1

SO123-III-0.17	Use of Procedures, Forms, and Laboratory Records	4TCN2
SO123-III-5.20	Assignment, Maintenance, Control, and Distribution of the Offsite Dose Calculation Manuals for Units 1,2, and 3	11
SO123-V-4.71	Software Development and Maintenance	9
SO123-V-5.10	Temporary Facility Modification	8
SO123-VI-1.3	Unreviewed Safety Question Screening Criteria and Environmental Evaluation for Orders, Procedures & Instructions	6
SO123-XIV-4.3	Preparation, Review and Approval of Turnover Packages for DCPs, MMPs, PFCs and LCPs	1TCN3
SO123-XV-4.13	Control of Work and Storage Areas Within the Protected Area	4TCN2
SO123-XV-44	10 CFR 50.59 Program	3
SO123-XV-51.1	Abandoned Equipment Program	0TCN2
SO123-XV-60.1	ORSC - Onsite Review Committee	4TCN1
SO123-XVII-10.13	Control of Computer Based Systems	6TCN1
SO123-XXI-8.4	Licensed Operator Requalification Examinations	8 & 9
SO123-XXI-1.11.7	Licensed Operator Requalification Training Program Description	9TCN1
SO123-XXIV-1.1	Document Review and Approval Control	5PCN4
SO123-XXIV-1.2	Nuclear Engineering Design Organization (NEDO) Engineering Quality Programs	2
SO123-XXIV-5.1	Engineering & Technical Services Software Quality Assurance	2
SO123-XXIV-8.7	Drawings and Design Change Notice Conversion	2TCN4
SO123-XXIV-10.9	Design Process Flow and Controls	4TCN3
SO123-XXIV-10.16	Development, Review, Approval, and Release of Conceptual Engineering Packages and Design Change Packages	3TCN3
SO123-XXIV-10.17	Interim Design Change Notice and Design Change Notice	4TCN2
SO123-XXIV-10.21	Field Change Notice and Field Interim Design Change Notice	7TCN3
SO123-XXVI-2.32	DCP Turnovers	2

SO123-XXIX-2.10	Design Change Process	2
SO123-XXX-2.4	Preparation, Review, and Approval of Changes to the SONGS License Controlled Specifications and Technical Specification Bases	3TCN1
SO123-XXX-5.2	Control of Licensing Document Changes	4
SO23-0-45	Operations Software Development and Maintenance	2TCN2
SO23-6-5	Main and Auxiliary Transformer Operation	7TCN2
SO23-6-6	Reserve Auxiliary Transformer Operation	8TCN3
SO23-6-29	Operation of Annunciators and Indicators	9
SO23-V-4.7	Control of Core Protection Calculator Addressable Constants	13
SO23-V-4.29	Control of COLSS Addressable Constants	7
SO23-V-13	Control of Plant Physics Data Books and Reactor Engineering Data Transmittals	5
SO23-XV-4.500	Control of SONGS 2 and 3 Barriers	3
SO23-XXXVI-2.10	Core Reload Analysis and Activities Checklist	4
EGG-001	Licensed Operator Examination Security Process	0
EGG-002	Requalification Exam Bank Maintenance	0
EGG-003	Licensed Operator Requalification Examination Sample Plan Development	0
EGG-004	Licensed Operator Requalification Examination Project Plan Development	0
EGG-005	Exam Records Management	0
EGG-006	Biennial Written Examination Process	0
EGG-007	Proctoring Requirements for Licensed Operator Biennial Written Examinations	0
EGG-008	Annual Walk-through Examination Process	0
EGG-009	Dynamic Examination Process	0

EGG-010	Developing/Revising Written Examination Questions	0
EGG-011	Developing, Revising, Modifying Job Performance Measures	0
EGG-012	Revising/Modifying Dynamic Scenarios	0
EGG-013	Periodic Examination Process	0

AUDIT REPORTS

NUMBER	TITLE	DATE
SCES-905-99	Station Operational Controls	November 18, 1999
SCES-913-99	Biannual Effectiveness of Corrective Action	June 2, 1999
SCES-915-99	Joint Utility Management Audit of the Southern California Edison Company San Onofre Nuclear Generating Station Nuclear Oversight Division	June 7-14, 1999
SCES-016-00	Corrective Action Program Audit	July 17, 2000

ACTION REQUESTS (AR)

971000261	990402248	990701579	991100485	000300537
981001900	990402380	990701613	991100784	000301737
981100452	990500181	990800877	991100954	000400381
981100521	990500860	990801633	991101109	000400462
981200304	990501187	990900161	991101160	000401086
990100654	990501305	990900434	991200108	000401454
990101167	990600760	990900496	991200172	000500530
990200037	990600812	990900774	991200682	000500619
990200810	990601313	990900779	000100111	000500662
990200839	990700015	990900842	000100155	000600022
990300146	990700603	990900843	000101035	000600411
990301002	990700946	990901543	000101672	000701262
990302013	990700951	991000553	000101672	000101584
990400684	990701170	991000703	000201131	000200675
990401197	990701246	991001107	000201149	
990401474	990701490	991001266	000300456	

MAINTENANCE ORDERS

NUMBER	TITLE	DATE
00050217000	Determine Minimum Pickup Voltage, and Current at That Voltage, for the Closing Coil on 5HK-1200 4160 Breakers	May 4, 2000

99010540000	Replace Chiller Control and Alarm Relays	March 29, 1999
10000745200	Replace Oil Heater Thermostat on Emerg Chiller E336	
10000745200	Replace Normally Energized Control & Alarm Relays that have Neon Lights and Replace Oil Heater Thermostat on Emerg Chiller E335	
99081983001	Inspect Foxboro Contact Isolator Modules for Defective P&B Relays	April 10, 2001
99082935000	Inspect Foxboro Contact Isolator Modules for Defective P&B Relays	September 26, 2000
10000553001	Perform AOV testing on the Feedwater Regulating Valves	
50008544000	Replace Air Set Regulator, Booster Relays, and Positioner	
99080046000	Cut and Weld Deck Grating	October 27, 1999
00051092000	Add New Fuse and Isolation Switch Contact to Salt Water Pump Control	
00051093000	Add New Fuse and Isolation Switch Contact to Salt Water Pump Control	

FIELD CHANGE NOTICES

NUMBER	TITLE/DESCRIPTION	DATE
F21065E	Problem in Existing Relay - Install Relay w/o Neon Lights	January 19, 2000
F21066E	Problem in Existing Relay - Install Relay w/o Neon Lights	January 19, 2000
F21067E	Problem in Existing Relay - Install Relay w/o Neon Lights	January 19, 2000
F21068E	Problem in Existing Relay - Install Relay w/o Neon Lights	January 19, 2000
F21069E	Problem in Existing Relay - Install Relay w/o Neon Lights	January 19, 2000

MISCELLANEOUS DOCUMENTS

AR Assignment Backlog Categorization Standard as Applied by the AR Backlog Management Team, May 1, 2000

Non-Conformance Report 000401086 - Emergency Core Cooling System Piping Insulation

Turbine Turns, August 30, 1999

Instrument Report 90065, Revision 0

Updated Final Safety Analysis Report, Section 7.5

Letter from the Licensee to the Office of Nuclear Reactor Regulation, May 13, 1982

Letter from the Office of Nuclear Reactor Regulation to the Licensee, May 4, 1984

Letter from the Office of Nuclear Reactor Regulation to the Licensee, July 26, 1984

Root Cause Evaluation 99-001, SONGS 3 Plant Trips Due to Spurious Operation of Feedwater Regulating Valves FV1111 and FV1121, June 24, 1999

Licensee Response Letter to Generic Letter 98-04, November 17, 1998

Licensee Response Letter to Generic Letter 99-02, September 9, 1999

Summary List of 50.59 Safety Evaluations from 6/19/00 to 7/13/00, July 13, 2000

List of Users Authorized to Approve Safety Evaluations in MOSAIC, July 17, 2000

List of Completed Training for New Process Requirements for 10 CFR 50.59 Evaluations, July 14, 2000

Memo to SONGS Employees, Subject: 10CFR50.59 Program Changes, June 12, 2000

LP/ISM T40001, New Requirements for 10 CFR 50.59 Safety Evaluations, Revision 0

10 CFR 50.59 Program Self Assessment (Draft), October 29, 1999

LP 2RP170, Decay Heat Removal with Reduced RCS Inventory, Revision 4

TSIE90, NRC IN 99-19 / INPO SEN 199, FW Htr Shell Rupture, July 21, 1999

Failure Analysis Report 99-007, 2A0418 Breaker Shutter Roller Pin Misplacement Issue, February 12, 1999

SCE Letter to ABB Svc Inc., ABB 5HK350-3000 Breaker Shutter Roller Pin Misplacement Issue, February 12, 1999

ABB Letter to SCE, 5HK350-3000 Amp Breaker Refurbishment Shutter Kick Pin Location, February 25, 1999

ABB Letter to SCE, "ABB Service Inc, Letter JC-1999-01, Dated February 25, 1999," March 23, 1999

ABB Letter to SCE, Status Update of Corrective Actions and Part 21 Finding, May 6, 1999

Non Conformance Report 990200810, Agastat E7000 Series Timing Relay, July 17, 2000

Control of Problem Equipment Lists, Revision 48, July 10, 2000

LP - HMPR1A, Human Performance Fundamentals Introduction, Revision 0

LP - HMPR1B, Human Performance Fundamentals Individual, Revision 0

ATTACHMENT 2

Material Requested

San Onofre Nuclear Generating Station Units 2 and 3
July 17-21, 2000

- All procedures governing or applying to the corrective action program, including the processing of information regarding generic communications and industry operating experiences
- Procedures and descriptions of any informal systems, especially used by operations, for issues below the threshold of the formal corrective action program
- A listing and index of all corrective action documents (ARs), sorted by department (e.g., engineering, maintenance, operations, etc.), for the period of December 1999 through June 2000
- A list of all corrective action documents that subsume or roll-up one or more smaller issues for the period of December 1999 through June 2000
- All audits or assessments performed for the period of June 1999 through June 2000 on the corrective action program
- For each of the Action Requests (ARs) listed below please provide the following:
 - ▶ Full text of the AR (please indicate any findings that did not result in an AR or corrective actions)
 - ▶ Any "Roll-up" or "Aggregating" ARs related to the generic communications or any ARs
 - ▶ Root Cause analysis report (if applicable)
 - ▶ Risk significance assessments
 - ▶ Probable Cause evaluation (if applicable)
 - ▶ Approved corrective actions
 - ▶ Basis for extending originally approved due dates
 - ▶ Evidence of corrective action completion (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)

AR 000101672	AR 990200865	AR 990701169
AR 000101584	AR 990200717	AR 990700603
AR 990401474	AR 990200721	AR 990701613
AR 000101035	AR 981201690	AR 990700951
AR 990100654	AR 981201691	AR 991200108
AR 991200172	AR 990100017	ER2 990901543
AR 991001107	AR 000300537	RCE 991100485
AR 990300146	AR 000100155	RCE 991200682
AR 990402380	AR 991000553	RCE 000201149
AR 98900715	AR 990400684	RCE 000300456
AR 99070022	AR 990402248	RCE 000400381
AR 990200839	AR 991001266	RCE 000400462
AR 990501187	AR 981001907	RCE 000401086
AR 990501305	AR 000301356	RCE 000401454

- For each of the generic communications listed below please provide the following:
 - ▶ Full text of any ARs written (please indicate any findings that did not result in an AR or corrective actions)
 - ▶ Any “Roll-up” or “Aggregating” ARs related to the generic communications
 - ▶ Root Cause analysis report (if applicable)
 - ▶ Risk significance assessments
 - ▶ Approved corrective actions
 - ▶ Basis for extending originally approved due dates
 - ▶ Evidence of corrective action completion (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)

Part 21 Reports

(The following numbers are found on the NRC web site for Part 21 Reports)

1999-05
1999-06
1999-12
1999-20
1999-26
1999-35
1999-39
1999-51
2000-02

NRC Generic Letters

98-004
99-002

NRC Information Notices

99-13
99-14
99-19
99-21
00-06
00-08

- Latest revision of procedure SO123-0-7

- Related to AR 991200682:
 - Root cause evaluation report (copy of Draft if not yet final)
 - SONGS 10 CFR 50.59 Self Assessment Report (copy of Draft if not yet final)
 - List of all qualified 50.59 preparers
 - LP/ISM T40001, Rev 0, w/ exercise and transmitting e-mail
 - Records of ISM T40001, Rev 0, completion by 50.59 preparers
 - Summary listing of all 50.59 evaluations documented in MOSAIC since 6/19/2000

- Latest revision of procedures:

SO123-0-20	SO123-XV-5	SO123-XXIV-10.9	SO23-V-4.7
SO123-0-23	SO123-XV-44	SO123-XXIV-10.16	SO23-V-4.29
SO123-IT-1	SO123-XV-51.1	SO123-XXIV-10.17	SO23-V-13
SO123-III-0.17	SO123-XV-52	SO123-XXIV-10.21	SO23-XV-4.500
SO123-III-5.20	SO123-XV-60.1	SO123-XXVI-2.32	SO23-XXXVI-2.10
SO123-V-4.71	SO123-XVII-10.13	SO123-XXIX-2.10	
SO123-V-5.10	SO123-XXIV-1.1	SO123-XXX-2.4	
SO123-VI-1.3	SO123-XXIV-1.2	SO123-XXX-5.2	
SO123-XIV-4.3	SO123-XXIV-5.1	SO23-0-45	
SO123-XV-4.13	SO123-XXIV-8.7	SO23-6-29	

- Related to AR 000201149
 - Biennial requalification examination schedule for 2000
 - Operating test (JPM and Simulator) sample plans for 2000 (if developed)
 - Procedure or guidance document that ensures the development of annual exam JPM and simulator sample plans (AR 990901515-1)
 - Upgraded written exam test item supporting documentation procedure/guidance (AR 990901515-4)
 - Latest revision of SO123-XXI-8.4 and SO23-1.11.7 (AR 990901515-5)
 - Records of completed training on the proctoring process for instructors (AR 990901515-7)
 - Records of training on changes to the exam security process (AR 990901515-9)
 - Revised procedure that clarifies remediation contact. (AR 990901515-10)
 - Record of the formal counseling of the Training Supervisor involved with examination issue #7 of AR 000201149
 - Documentation related to prohibiting supervisors, involved in the approval of the 2/16 exam, from future exam review and approval pending RCE results.
- All metrics for Corrective Action process monitoring as required by Procedure SO123-XV-50, Section 6.12.
- Root Cause Evaluation 99-01 involving the SONGS Unit 3 plant trip due to spurious operation of FW regulating valves. (This REC is referred to in AR 990501187.)
- For AR 000101672, a list and status of corrective actions with due/completion dates.

- For AR 000400462, Unit 3 drop of CEA #84:
 - List and status of corrective actions with due/completion dates.
 - A contact to discuss corrective actions for hall effect sensors
 - Procedure SO23-3-2.19 showing change made as a result of the AR
 - Alarm response procedure SO23-15-50.A2 showing change made as a result of the AR.
- For ARs 990501187 and 990501305, Unit 3 FWIV induced trips:
 - List and status of corrective actions with due/completion dates.
 - A contact to discuss how these failures were counted for maintenance rule and the MRule performance criteria for the feed water system.
 - A contact to discuss how extent of condition was addressed for relay degradation.
- For AR 990200865:
 - List and status of corrective actions with due/completion dates.
 - Copy of AR 990301002 EEB assignment - future work to address ECWS reliability.
 - Copy of SO123-O-23 #C-99-021 plant abnormal alignment
- For AR 000101035, list and status of corrective actions with due/completion dates.
- For AR 000101584, list and status of corrective actions with due/completion dates.
- For AR 990700951, list and status of corrective actions with due/completion dates.
- Documentation for AR 990401474, assignment 1, planned corrective actions a, c-i
- Documentation for AR 990100654, assignment 4, corrective actions c,d,e
- Documentation for NCV 9915-01 corrective actions, AR 991001107 does not provide any
- Discussion with person on corrective actions for NCV 99012-02, AR 990402380
- Documented corrective actions (AR) for NRC Inspection Report (IR) 99016, Section O8.1, negative finding
- Documented corrective actions (AR) for NRC IR 99012, Section O4.1, negative finding
- Documented corrective actions (AR) for NRC IR 99003, Section O2.1, negative finding of the weakness of Procedure SO23-5-1.8.1
- Status of corrective actions in AR 000300537 for NRC IR 2000-05, Section M1.3, negative finding
- Status of corrective actions in AR 000100155 for NRC IR 99-019, Section M1.3, negative finding

- Documentation of AR 991000553, assignments 3 and 4 corrective actions, and documented corrective actions addressing the communications weakness from NRC IR 99015, Section M1.4
- NRC IR 99-09, Section M2.2, Subsection b.1 references AR 990701169. This AR has nothing to do with the EDG. Need the correct AR.
- For ARs 990700603 and 99071613 - P&IDs 40101A, Rev 12 and 40101AS03, Rev 10 and the procurement documents for each of the spacer/orifice plates.
- Procedure SO123-XV-5.1, Temporary Modification Control
- AR Item 000401454-05, Root Cause Evaluation. Due date was 5/27/00 - was not included with package.
- For AR 000401454, need operations procedure/lineup that show that the blocking mechanisms installed on salt water cooling pump valves or other documentation used to control these blocking mechanisms.
- For AR 000401086, Item 18 - if available, need design documentation that is being used to install permanent insulation on ECCS piping. (could be part of Item 19)
- Listing of the following for the last year:
 - Support Maintenance Orders (SMs)
 - Repetitive Maintenance Orders (SV, PM)
 - Leadership Observations (LOPs) (Only those that rose to the AR threshold.)
 - Initial Root Cause Assessments (IRC)
- Related to AR 000200675-10: MOSAIC summary listing of the 10 most recent entries that flagged work inside containment for qualified coating requirement review.
- Related to AR 990601313: Copy of Nucon Certificate of Compliance, dated 8/10/99
- Related to AR 990500181:
 - Revised design calculations that evaluated the DC control voltage drop between the switchgear or load center panel and individual circuit breakers (990500181-02)
 - PRO assignment to electrical maintenance (990500181-02)
 - Determination of minimum pickup voltage and current for the closing coil on two 5HK-1200 4160 breakers (990500181-05)
- Related to AR 990500860: Lesson Plan 2RP170, Reduced Inventory Control; AR 990801633
- Related to AR 990600812:
 - Reading assignment TSIE 90, including ISEG evaluation
 - Record of completion of TSIE 90 (acknowledgments) noting any exceptions.
 - Analysis of feedwater heater specifications and operational environment
 - FAC inspection plan showing schedule for Unit 2/3 feedwater heaters 1-6

- Related to AR 990700015: Training materials related to the 4 hour Human Performance Fundamentals course to be given prior to U2C11 outage. Include attendance records for training completed to date noting any exceptions. (99070015-02)
- Related to AR 990200810: NCRs generated for Agastat relays 2L154-2/3R7, 2L154-2/3R8, 2L154-2/3R9
- Related to ARs 990700603 and 99071613: Need start-up documents showing removal of temporary strainers
- Related to AR 990200839:
 - Dates that modification to piping completed - modification that fixed the stroking issue
 - LER 1999-003-00 references modification which connected non-safety related nitrogen lines to non-safety related air supply lines to CCW/NCL
 - FCN 1648M (referenced in Action Item 18)
 - ARs 990200519, 990200520, 990200558, 990200559
 - LER (page 4) discussed generic review - results and copy of AR that tracked generic concern
- Related to AR Item 971000261-13:
 - Security Training Expiration Report and it's associated distribution list
 - Copies of AR Items 971000261-14 and 971000261-15
 - ARs associated with 1999 and 2000 problems for late security officer requalification
- Related to AR Item 990401197-01:
 - Any other CBOP instances since May 1999 - copies of ARs
 - The corrective action stated that SCE employees would also have their badges automatically deactivated if not used in 30 days - record of this being completed.
- ARs 9911011160, 991101109 and all additional documentation related to the operability assessments (RCE 000400381 was canceled).
- ARs 990400037, 990400944, 990500581, 990501849, 990501619
- Documentation to support the corrective actions for AR 990701579, action item 12 (ETR), items 6A, 6B, and 6C.
- Documentation to support the corrective actions for AR 990300146-09 (corrective actions 1 - 5) and any information to explain how the RCP oil fill amounts are administratively controlled.
- Related to Audit Report SCES-905-99:
 - AR 991001175-1 (Audit Finding API 4.3.A)
 - Commitment EOI-155
 - TCN 4-1 to Procedure SO23-0-39
 - AR 991001175-2 (Audit Finding API 4.3.B)
- Related to Audit Report SCES-913-99:
 - CAR 981000012-11 and completed corrective actions

ER3 (970600418-03, CAF 970600418-05)

ER3 990400509

EEC 950800192-03, Failure of ISO PAK Converters (CAF 950800192-08)

- Related to Audit Report SCES-915-99:
 - Latest monthly CAR/PRR status report
 - CAR 981200479-1
 - Latest copy of the backlog of AR items assigned to ISEG

ATTACHMENT 3

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection Findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN Findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE Findings indicate issues that are of low to moderate safety significance. YELLOW Findings are issues that are of substantial safety significance. RED Findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin, but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner, which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.