U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-206/88-02, 50-361/88-02, 50-362/88-02

Docket Nos. 50-206, 50-361, 50-362

License Nos. DPR-13, NPF-10, NPF-15

Licensee: Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Facility Name: San Onofre Nuclear Generating Station Units 1, 2, 3

Inspection at: San Clemente, California

Inspection Conducted: January 4-8 and February 1-5, 1988

Inspectors: for P. M. Qualls, Project Inspector — 3/9/88 Date Signed

for J. O'Brien, Reactor Inspector — 3/9/88 Date Signed

Approved by: P. H. Johnson, Chief
Reactor Projects Section 3 — 3/9/88 Date Signed

Inspection Summary:

Inspection on January 4 - February 5, 1988 (Report Nos. 50-206/88-02, 50-361/88-02, 50-362/88-02)

Areas Inspected: Routine project inspection in the areas of licensed and non-licensed operator training programs, Information Notices and Part 21 report followup, compliance with ATWS rule (10 CFR 50.62), design change and modification programs, surveillance testing, and calibration control programs. Inspection procedures 30703, 37700, 36100, 41400, 41701, 61725, 92701, 71707 and TI 2500/20 were covered.

Results: In the areas inspected, no violations or deviations were identified. The licensee's responses to six Information Notices and Part 21 reports were reviewed and closed (for all three units). One followup item was opened concerning the licensee's annual 10 CFR 50.59 report.

DETAILS

1. Persons Contacted

+ C. B. McCarthy, Vice President/Site Manager
+*H. E. Morgan, Station Manager
+*D. B. Schone, Site QA Manager
+*M. A. Wharton, Assistant Technical Manager
+ S. T. Brooks, Radiation Material Supervisor
+*C. A. Couser, Compliance Engineer
*J. P. Shipwash, Compliance Supervisor
*M. P. Short, Nuclear Training Manager
*K. Slagle, M. and A.S. Manager
*J. W. Scott, Unit 1 HP Supervisor
*K. O'Connor, Project Field Manager
*N. R. Dickinson, Project Engineer
*J. K. Yann, Project Engineer
*N. Maringas, ISEG Engineer
+ J. Winter, SDG&E Engineer
+ S. McMahan, Maintenance Engineer
+ D. C. Stonecipher, QC Manager
+ J. Hammon, QA Supervisor
+ G. W. McDonald, QA Supervisor

*Denotes attendance at January 8, 1988 exit meeting.

+ Denotes attendance at February 5, 1988 exit meeting.

In addition, other members of the licensee's staff were contacted during the course of the inspection.

2. Training (IE Manual Chapters 41400 and 41701)

a. August 31, 1987 Event in Unit 2

The inspector reviewed the August 31, 1987 unisolable leak event in Unit 2 to determine whether training had been a factor in the event. The following conclusions were reached by the inspector:

Classroom training in the licensing process appeared adequate. A procedural problem associated with NCR closure was a contributing factor to the event, and additional training of the operators on this detail was performed as followup to the event. It appeared to the inspector that the level of detail of the NCR problem was more than normally addressed by the licensed operator/non-licensed operator training process, and that the training program did not contribute to causing the event. The operators appeared to be adequately trained when the event occurred as is evidenced by the subsequent corrective actions taken. The operators appeared to have properly controlled the event to mitigate its consequences.

b. Records Review

The inspector reviewed the training records of the operators involved in the August event and a random sample of other licensed and non-licensed personnel. The records contained results of the most recent exams, lecture attendance records, records of required manipulations, records of additional training received, records of completed self-study, and records of duty resumption after exam failure and subsequent passing of a repeat examination.

The pass rate for the licensee's requal exams has been about 90%. INPO accreditation for the licensed operator training programs was received in December 1985.

c. Training Lecture

The inspector attended a training lecture for the licensed operator qualification training. The instructor was well prepared, knowledgeable and presented the material well. There was good class interaction and the instructor made good use of training aids.

3. Information Notices (IE Manual Chapter 92701)

In a previous inspection in November 1987 the inspector reviewed the licensee's program to review and followup on NRC Information Notices. To complete the inspection, the inspector followed up licensee actions on Information Notices IN 87-08, IN 87-34 and IN 87-35.

a. IN 87-08 (Closed) The notice concerning limitorque motors was addressed by the licensee previously when received as a Part 21 report. The motors were reworked and returned to service. This item is closed.

b. IN-87-34 (Closed) This notice concerned the independence of instrument lines. The licensee review concluded that they clearly had independence. This item is closed.

c. IN-87-35 (Closed) This notice concerned DS-416 Reactor Trip Breakers. The licensee review concluded that they used no DS-416 breaker as reactor trip breakers. This item is closed.

The inspection showed that the INs had been reviewed for applicability and distributed to appropriate personnel, and that appropriate followup actions were taken.

No items of noncompliance or deviations were identified.

4. Followup of Part 21 Reports (IE Manual Chapter 36100)

The inspector followed up licensee action on the following part 21 reports.

a. 87-06-P (Closed) Westinghouse Coils for IE Motor Starters

The licensee review determined that they had 8 affected AC coils. These were all in the warehouse and were returned to the vendor. This item is closed.

b. 87-08-P (Closed) GE HFA Relay Binding

Station technical personnel reviewed this Part 21 report, which related to possible relay binding due to a mispositioned stop tab, and concluded that the current inspection program would detect suspect relays and thereby prevent the binding problem. They concluded that previous operating experience substantiated this conclusion. This item is closed.

c. 87-14-P (Closed) Air Pressure Regulator

The licensee reviewed the parts inventory and determined that none of the parts were in stock. This item is closed.

No items of noncompliance or deviations were identified.

5. Compliance with ATWS Rule, 10 CFR 50.62 (Temporary Instruction 2500/20)

The purpose of this inspection was to assess the licensee's efforts to comply with the Anticipated Transient Without Scram (ATWS) rule, 10 CFR 50.62. Specifically, the inspector intended to review the licensee's plan for design, procurement, installation and testing for ATWS equipment that is not safety related. The NRC issued Generic Letter GL-85-06 on April 16, 1985, which provided guidance for this effort. The licensee's response to date was to submit to NRR their design criteria and schedule for implementation. Future inspection effort will involve verifying that the approved design criteria are met and that equipment is properly received, installed and tested. The status of each plant was as follows:

a. SONGS Unit 1:

- 10/27/87 - SCE submitted planned schedule for installation of equipment and submittal of specific design criteria for Unit 1.
- 4/1/87 - SCE submitted specific design details identifying which systems need redesign.
- 7/24/87 - NRR approved planned schedule for installation during Cycle XI refueling outage.
- 1/29/88 - SCE submitted Plant Specific ATWS Mitigation System Actuation Circuitry (AMSAC) Design to NRR for approval.

No further inspection activity is anticipated until this design has been approved and procurement is started. The time frame is unknown at this time.

b. SONGS Units 2/3:

- 10/15/85 - SCE made a commitment to a Diversified Scram System (DSS), identified affected systems, and proposed Cycle 4 refueling for installation.

- 8/4/86 - NRR provided design criteria necessary for diversity.

- 12/30/86 - SCE and owners' group submitted system design and safety evaluation.

- 7/27/87 - SCE submitted delay in schedule to Cycle 5 refueling for each unit.

- 1/11/88 - NRR informed the licensee that the design for new CE plants did not satisfy diversity requirements.

At the conclusion of the inspection the licensee had not completed plans for their course of action. A meeting at NRR was anticipated in mid-February '88. No inspection activity is anticipated for the near future.

No violations or deviations were identified.

6. Design, Design Changes and Modifications - (IE Manual Chapter 37700)

a. The inspector reviewed a listing of all of the major modification in each of the units since the start of the last refueling outages. Four modifications for each unit were selected and reviewed in detail. The plant systems selected for each were: the reactor coolant system, emergency core cooling system, radioactive waste system and power conversion system.

The detailed review of each modification involved a thorough review of the proposed facility change (PFC) package, design change packages (DCP) and turnover packages.

The inspector verified that for each modification:

- The changes were reviewed by the licensee in accordance with 10 CFR 50.59.

- The DCP's were reviewed and approved in accordance with Technical Specifications.

- The DCP's were controlled by established procedures.

- Post-modification tests were conducted satisfactorily.

- Where required, procedure changes were made and approved.

- The plant "as-built" drawings were controlled and updated.

- Design changes were accomplished in accordance with appropriate requirements.

- Acceptance testing was conducted in accordance with approved procedures.

- When required, these modifications were listed and the modification descriptions were briefly summarized in the annual 10 CFR 50.59(b) report to the NRC.

Concerning the last item, it was noted during the inspection that the compliance engineering staff has been selecting modifications for the report based on completion of the proposed facility change package. At that time no modification has actually been completed; the design work and safety analysis have been completed and the work is funded for the next fiscal year. The inspector noted that most licensees report such changes to the NRC when the modification has been substantially or completely installed. This will be reviewed during a future inspection. (Followup Item 206/88-02-01).

b. The inspector reviewed the backlog of outstanding DCP's and determined that a very small backlog existed. The planning to accomplish outstanding DCP's appeared adequate. No DCP's which involved immediate safety concerns were outstanding.

c. The inspector reviewed the licensee's procedures to control temporary modifications of plant systems. The inspector verified that:

- controls of modifications required review and approval in accordance with Section 6 of the Technical Specifications, 10 CFR 50.59 and the approved QA program

- personnel were using detailed, approved procedures

- responsibility for approval was assigned

- a formal record of modifications was maintained in the control rooms and the status of modifications was known

- controls required functional testing of equipment affected following removal of temporary modifications

- jumpers and lifted leads were controlled by temporary changes to operating, surveillance or maintenance procedures

No violations or deviations were identified.

7. Surveillance Testing and Calibration Control Program (IE Manual Chapter 61725) (Unit 1 only)

a. Review of Implementing Procedures

The inspectors reviewed the latest revisions of the following station procedures which defined and implemented the surveillance testing and calibration control program:

Procedure No.	Title
SO123-G-3	"Technical Specification Surveillance Requirements"
SO123-I-1.7	"Maintenance Order Preparation, Use and Scheduling"
SO1-12.0-2	"Operating Surveillance Implementation"
SO1-12.0-4	"Operations Surveillance Requirements for Mode Changes"
SO123-I-1.3	"Maintenance Documentation"
SO123-I-1.19	"Maintenance Department Technical Specification Surveillance Program Implementation"

The review also included discussion with personnel and management responsible for program development and implementation.

Based on this review, the inspectors verified that a program existed to control surveillance and calibrations required by Technical Specifications through the use of inter-departmental surveillance schedule memos and the computerized San Onofre Maintenance Management System. The inspector also verified that responsibilities had been delineated to ensure surveillance requirements have been satisfied.

b. Review of Surveillance Test and Instrument Calibration Records

The inspectors reviewed documentation for approximately 25 randomly selected surveillance tests and instrument calibrations. Attributes examined included performance of surveillance or calibration within the proper time interval including allowable time extensions; completion of all applicable elements with acceptable results; review and signoff by appropriate supervisor and quality assurance engineers, where required; verification of restoration and post maintenance checks; and use of calibrated instruments. Surveillance records were selected at random from the Operations, Maintenance, and Instrument and Controls groups. Calibration records were selected from the Instrument and Controls group.

This review showed that surveillances and calibrations had been performed within the frequency required by Technical Specifications, and that the results had been reviewed by the appropriate level of management and by required departments. Additionally, those items that had failed to meet the required acceptance criteria were resolved and documented in accordance with procedure requirements. Calibrated instruments were used to perform the surveillances and calibrations where required.

c. Inservice Testing Program - Review of Implementing Procedures

The inspector reviewed the following documents which define and implement the Inservice Testing Program for Pumps and Valves.

Attributes examined and verified included the establishment of a program for scheduling and tracking testing requirements; the assignment of responsibility for completion of testing; the establishment of detailed test procedures; and the establishment of methods and responsibilities for the review and evaluation of test results and the reporting of deficient conditions.

Procedure No.	Title
SO1-V-2.14	Inservice Testing of Pumps Program (Unit 1)
SO1-V-2.15	Inservice Testing of Valves Program (Unit 1)
SO1-12.4-2	Operating Inservice Valve Testing
N/A	IST Program Weekly Status Report and Monthly Schedule

No violations or deviations were identified.

8. Plant Tour

The inspector toured the facilities during the backshift hours of 10:00 p.m. to 2:00 a.m. on two consecutive evenings (Unit 3 - 2/3/88, Unit 1 - 2/4/88). Shift turnover was observed, control room logs were reviewed, surveillance testing and maintenance in progress were reviewed, control boards were walked down and accessible areas of plants were toured.

- The inspector found the operators alert and attentive to their duties.
- No deficiencies were observed in the health physics activities during the tours.
- The material condition of plant components was well maintained and housekeeping activities appeared to be effective.

No violations or deviations were identified.

9. Exit Meeting

An exit meeting was held with members of the licensee's staff at the conclusion of each week of inspection (as noted in paragraph 1). The inspectors summarized the inspection activities and observations as discussed in this report.