

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-206/90-30, 50-361/90-30, and 50-362/90-30

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

License: Southern California Edison Company
Irvine Operations Center
23 Parker Street
Irvine, California 92718

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

Inspection at: San Onofre Site, San Diego County, California

Inspection Conducted: July 23-27, 1990

Inspectors:

Kent M. Prendergast
Kent M. Prendergast
Emergency Preparedness Analyst

8/10/90
Date Signed

Approved by:

John Roberts
John Roberts, Chief
Safeguards, Emergency Preparedness, and
Non-Power Reactor Branch

8/10/90
Date Signed

Areas Inspected: Unannounced routine inspection of the Emergency Preparedness Program including on-site follow-up of written reports of non-routine events at power reactor facilities and open items. Inspection procedures 92701, 92700, and 82701 were covered.

Results:

Results: The licensee's program appears satisfactory in the area of emergency preparedness. Strengths identified during this inspection included actions to improve the operation of the EOF and management involvement in the Emergency Preparedness Program. The only weaknesses identified involved some inadequacies in the Unit 1 electrical drawings and work authorization process. No violations of NRC requirements were identified.

DETAILS1. Persons Contacted:

- *H. Morgan, Vice President and Site Manager
- *W. Zintl, Manager of Site Emergency Preparedness
- *K. Bellis, Manger, Nuclear Affairs and Emergency Planning
- *A. Schramm, Unit 1 Operations Superintendent
- *D. Brevig, Onsite Nuclear Licensing Supervisor
- *C. Anderson, Supervisor, Site Emergency Planning
- *P. Dooley, Supervisor, Nuclear Affairs and Emergency Planning
- J. Wallace, Supervisor, Nuclear Affairs and Emergency Planning
- K. Flynn, Station Technical Engineer
- K. Fowler, Station Emergency Planning

*Indicates licensee personnel attending the exit interview.

2. Follow-up of Open Items (92701)

(Closed) Open Item 86-23-01, Unit 1 Technical Support Center (TSC) habitability. This item was discussed with members of the licensee staff and NRR. Based on these discussions it was learned that the licensee is upgrading the Unit 1 Control Room and TSC ventilation systems during the cycle 12 refueling outage. It was also learned that the upgrades to the Unit 1 Control Room and TSC ventilation systems are presently under review by NRR. At the request of NRR, to avoid redundant tracking of this issue, this item will be closed and followed by NRR.

(Closed) Open Item 86-23-02, Regulatory Guide 1.97 variables availability in the TSC and EOF. This item was examined and also noted to be under review by NRR. At the request of NRR, this item will also be closed and followed by to NRR.

(Closed) Open Item 90-08-02, Follow-up on a violation for failure to perform an annual Post Accident Sampling System Drill. The licensee's timely letter of April 17, 1990 described their corrective action in response to the Notice of Violation. The corrective actions included: Further management control over drill cancellation or postponement, changes to the licensee's drill procedure, and the completion of a PASS Drill by May 15, 1990. The inspector examined the their corrective actions and they appeared satisfactory to preclude additional problems in this area. This item is closed.

3. Onsite Follow-up of Written Reports of Non-Routine Events at Power Reactor Facilities (92700)

On July 20, 1990, at 1712, the licensee reported a loss of offsite sirens from the Unit 1 TSC due to a power failure to the siren control panel. This area was examined and the following were noted.

The cause of the loss of power appears to be an inadequate electrical drawing and an inadequate work authorization review. The work

authorization request was authorized even though the authorization stated, "the drawings are not very clear about what Y28 powers," which indicates the work request and drawing used for the request was less than adequate.

According to members of licensee staff who investigated this incident, the panel to activate the sirens failed when power was cut to the panel at 0630 Friday, July 20, 1990. The power to the panel was on back-up batteries at that time and the panel was still considered operational. At 0630 the audible alarm for the siren control panel indicated problems with the siren panel. The on-shift Nuclear Operations Assistant (NOA), aware of the alarm, silenced the alarm and notified the Unit 1 CR Supervisor. The significance of the alarm went unrealized until approximately 1600 when the Swing Shift NOA, observed that the beach siren panel was deenergised with no lights on because the back-up batteries had failed. The NOA reported the panel to be inoperable to the Unit 1 Shift Superintendent (SS). The exact time the batteries depleted was not be determined. At 1620, after receiving notification of the panel that the panel was inoperable, the SS began his evaluation as to reportability of this event and the cause for the loss of power. The SS examined procedure SO123-0-14, "Notification and Reporting of Significant Events" and determined the loss of the panel rendered the activation of the five beach sirens inoperable from the TSC. The SS attributed the loss of power to the maintenance being performed on panel Y-28. The SS notified the NRC of the loss of siren capability at 1712 Pacific Daylight Time (PDT). The sirens were returned to service at 1740 PDT.

The licensee has initiated an investigation of this event which will be completed in approximately 60 days. Thus far, the following areas have been identified for improvement"

- o The NOA's and Control Room Supervisors will receive further training on the siren panel and reportability .
- o The licensee will make improvements to SONGS Administration Procedure SO123-VI-10.0, "Community Alert Siren System" and SO123-0-14, "Reportability of Events", and will initiate a new program to track the the operability of all 49 offsite sirens.
- o The inadequacies in the drawings for panel Y-28 will be corrected. The licensee will also initiate actions to determine if other drawings require correction or updating. In addition, the licensee will provide counseling and training on this subject to the individuals responsible for approving work authorization requests.
- o The licensee has also installed a laminated placard with instructions for notifications and relevant procedures should the siren panel alarms be observed or heard.

Based upon the above actions, it appears the licensee made appropriate notifications once it was determined the panel was inoperable and are taking steps to improve this area. However, further effort appears necessary to update drawings for Unit 1 and to insure work authorizations

are not approved without a full understanding of all the systems to be affected under the work authorization. The inadequacies in the Unit 1 drawings and and work authorization process will be followed under open item number 90-30-01.

4. Status of the Emergency Preparedness Program (82701)

a. Organization and Management Control

Discussions with members of emergency preparedness (EP) staff were held and numerous changes are being implemented. The following represent some of these changes.

The licensee has a new manager for the Site EP Program. This individual has been a member of SCE staff for many years and has experience in nuclear engineering and reactor operations. The individual appears well qualified and should benefit the Emergency Preparedness Program.

The licensee is also in the process of making numerous changes to the Emergency Preparedness (EP) Program. The changes for the most part appear designed to centralize responsibility for the licensee's Emergency Response Facilities (ERFs) to the Site EP Program. Some of these changes include the transfer of responsibility from Nuclear Affairs and Emergency Planning (NA&EP) to Site Emergency Preparedness the responsibilities for the following: the design, operation, and maintenance of the Emergency Operations Facility (EOF), the alternate EOF, the Headquarters Support Center; drills and exercises associated with the above; emergency response training; the Emergency Plan, Emergency Support Organization Manual, and the Emergency Recall List. NA&EP still maintains the responsibility for the Operation of the Emergency News Center, offsite training and public education, and many activities affecting coordination and assistance with offsite agencies.

The changes to operation of the EOF appear to be responsive to NRC concerns identified during the 1989 annual exercise by increasing the technical expertise in the EOF. These changes and should improve the operation of the EOF. These changes are still in process at this time and are expected to be completed prior to the 1990 annual exercise. When the changes are completed, the Emergency Plan and implementing procedures will require revision to be current with the licensee's program for emergency response. The changes will be followed during the course of the routine inspection program for EP.

The licensee also discussed numerous changes and turnover in the offsite agencies.

The changes to the licensee's emergency preparedness program demonstrate upper managements involvement with the EP Program and their actions to improve the operation of their emergency response facilities.

b. Licensee Audits

Licensee Audit SCES-046-89 was performed October 6-16, 1990, and evaluated Emergency Response Team (ERT) training and procedural controls. The audit identified some conflicts regarding the frequency for required ERT. Corrective Action Request (CAR) SO-P-1245 was written to address a conflict in the Emergency Plan regarding a requirement for annual training for emergency response personnel (ERP) and the 15 month retraining interval for individuals who are members of the Nuclear Emergency Response Team (NERT). Both the ERPs and the NERTs have an annual requirement to complete training. However, the NERT training is tied to Red Badge training, which allows a three month grace period to complete the training. Since the 3 month grace period is allowed for in the Technical Specifications and has been approved in the Emergency Plan, the licensee will adopt the three month grace period for all ERT training and make necessary revisions to affected procedures. In addition, the licensee plans to incorporate all ERT training into a single tracking system. As part of this inspection, the inspector examined the licensee's corrective action along with records of required emergency response training and they appeared adequate.

Licensee performance in this program area is fully satisfactory. No violations were identified.

c. Drills and Exercises

The Emergency Plan, implementing procedures, and records of drills and exercises were examined. The records documented that drills and exercises had been conducted pursuant to the Emergency Plan and implementing procedures. The inspector also examined the licensee's tracking system to determine that items identified during drills and exercises are being resolved. The inspector noted that the tracking system was current and up to date and that the licensee is actively tracking and resolving items identified during drills and exercises.

The inspector observed an EOF drill held during this inspection and confirmed the licensee's efforts to improve the operation of the EOF and to enhance the information available to the Emergency Coordinator in the EOF. The licensee plans a rigorous schedule of drills every other week until they are fully satisfied with the operation of the EOF.

The licensee also shared a new drill manual containing approximately 40 different accident scenarios. The manual is intended to be used for unannounced interviews with the members of the Control Room staff as a method to improve and assess their capabilities for emergency classification.

Licensee performance in this program area is fully satisfactory.

d. Emergency Facilities

The licensee's EOF and Unit 1 TSC were observed during the inspection and the following were noted.

The licensee is in the process of rearranging the EOF floor plans to facilitate the operation of the EOF. When the changes are completed, the Emergency Plan and implementing procedures will be revised to reflect the changes. The emergency equipment in the EOF was observed to be functional and within calibration.

The Unit 1 TSC displayed the effects of the current outage for Unit 1. Some cabinets were open for maintenance and security was present at one door to the Control Room, which was open to allow air ducting through the door. The emergency equipment in the lockers were examined and observed to be operational and within calibration. The only area for comment dealt with the licensee's pocket dosimeters located in the emergency cabinets. The licensee appeared to have an adequate supply of dosimeters capable of measuring whole body dose to 5 Rem. However, it was noted in a 1986 analysis of the Control Room habitability that the calculated whole body dose following a design basis LOCA for the Control Room and TSC respectively may exceed the GDC 19 limit of five Rem by 1.6 Rem. Consequently, the present dosimeters limited to five rem without resetting may not be adequate. This item was brought to the licensee's attention during the exit interview and the licensee committed to examine this issue.

Licensee performance in this program area appears fully satisfactory. No violations of NRC requirements were identified.

5. Exit Interview

An exit interview to discuss preliminary NRC findings was held on July 27, 1990. Licensee personnel present at this meeting are identified in Section 1 of this report. The NRC was also represented by C. Townsend, Resident Inspector. The licensee was informed that no violations of NRC requirements were identified in the course of this inspection. Other items discussed during this meeting are described in Sections 2 through 4 of this report.