

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-206/83-24 (IE-V-601)  
50-361/83-39  
50-362/83-38

Docket No. 50-206 License No. DPR-13  
50-361 NDF-10  
50-362 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 and 3

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

Inspection conducted: December 5-9, 1983

Inspectors: *H. S. North* 1/11/84  
H. S. North, Radiation Specialist, Team Leader Date Signed  
*G. M. Temple* 1/11/84  
G. M. Temple, Radiation Technician Date Signed  
(Instrumentation)

Team Members: W. V. Thomas, Pacific Northwest Laboratories

F. L. McManus, Comex Corporation

Approved by: *M. D. Schuster* 1/12/84  
M. D. Schuster, Chief, Security Licensing Date Signed  
and Emergency Preparedness Section

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Summary:

Inspection on December 5-9, 1983 (Report Nos. 50-206/83-24, 50-361/83-39 and 50-362/83-38)

Areas Inspected:

Routine announced emergency preparedness inspection in the areas of emergency detection and classification, protective action decision making, notification and communications, changes to the emergency preparedness program, knowledge and performance of duties (training), post accident measurements and instrumentation, emergency worker protection, followup on 20 Appraisal Improvement Areas from the Emergency Preparedness Appraisal of October 26 - November 6, 1981 and followup on an Information Notice.

The inspection involved a total of 178 hours onsite by 4 inspectors.

Results:

In the nine areas inspected no significant deficiencies or violations of NRC requirements were identified.

## DETAILS

### 1. Persons Contacted

#### San Onofre Station

- \*W. Moody, Deputy Station Manager
- \*J. Albers, Health Physics Supervisor Unit 1
  - J. Barrow, Health Physics Foreman Units 2/3
  - K. Bazilio, Dosimetry Shift Supervisor, Respirator Coordinator
- \*D. Bennette, Engineer Emergency Preparedness
  - D. Brevig, Chemistry Supervisor
  - J. Brooks, Health Physics Foreman Unit 1
  - B. Brown, Shift Supervisor Units 2/3
  - T. Cooper, Lead AWS Switchboard Operator
- \*P. Croy, Manager Station Compliance
- \*T. DeGasperin, Emergency Planning Specialist
- \*J. Derfelt, Material and Administrative Services
  - C. Elliott, Shift Supervisor Units 2/3
  - K. Fowler, Shift Technical Communicator
  - S. Funk, Instructor, Nuclear Training Division (NTD)
- \*R. Gray, Health Physics Supervisor Units 2/3
  - K. Helm, Effluent Engineer
  - A. Hocking, Nuclear Operations Assistant Units 2/3
- \*P. King, QA Supervisor
- \*P. Knapp, Manager Health Physics
  - J. Kroeger, Shift Supervisor Unit 1
  - M. Lisitza, Shift Supervisor Units 2/3
  - T. Mackey, Supervisor Compliance
  - W. March, Plant Superintendent Units 2/3
- \*W. McGhee, Unit 1 Procedures Group
  - M. Morganelli, Shift Communicator Units 2/3
  - N. Newport, Supervisor AWS Switchboard Operators
  - J. Newton, Health Physics Foreman Unit 1
- \*G. Noel, General Training Administrator, NTD
  - R. Nolan, Compliance Engineer
- \*J. Pagliaro, Lead Engineer Technical Compliance
- \*G. Patrissi, Manager Emergency Preparedness
  - D. Peacor, Compliance Engineer
  - F. Rodriguez, Shift Technical Communicator
  - E. Sanders, AWS Switchboard Operator
  - R. Santosuosso, Supervisor I&C
- \*M. Speer, Compliance Engineer
  - T. Vogt, Shift Supervisor Units 2/3
  - R. Warnock, Health Physics Engineering Supervisor
  - M. Wear, AWS Switchboard Operator
- \*S. Wylie, Instructor, NTD

#### SCE-Corporate

- \*E. Bennett, QA Engineer
- G. Buzzelli, Emergency Planning Coordinator/Scientist,  
Nuclear Affairs and Emergency Planning (NA&EP)

\*J. Curran, Manager QA  
 \*P. Dooley, Supervisor, Corporate Emergency Planning, NA&EP  
 \*F. Jackley, Manager NA&EP  
 R. Reese, QA Engineer (Health Physics)  
 D. Schone, Site QA Manager

Non SCE

C. Anderson, Consultant (ASTA)

\*Denotes attendance at the exit interview on December 9, 1983.

2. Followup on Information Notice

The inspectors verified that the licensee had received, reviewed for applicability and taken or had initiated appropriate action in response to: IE Information Notice No. 83-28: Criteria for Protective Action Recommendations for General Emergencies. The licensee's procedures with respect to such notices included a documented review by the Independent Safety Engineering Group (ISEG), which specified a recommended action and the action priority. The review and proposed actions were documented in the computer based NEO Commitment Register (NEOCR) which included ISEG recommendations, task assignment and followup documentation. The NEOCR provided an auditable paper trail with respect to specific items.

Action was not complete with respect to IE Notice No. 83-28 at the time of the inspection.

Emergency Plan Implementing Procedures (EPIPs), SO123-VIII-10 EMERGENCY COORDINATOR DUTIES and SO123-VIII-40 HEALTH PHYSICS LEADER DUTIES were being revised in response to the notice (IN-83-28, Closed).

3. Follow-up on 20 Appraisal Improvement Areas

An Emergency Preparedness Appraisal was conducted at SONGS during the period October 26 - November 6, 1981. Appendix B to the March 24, 1982 letter transmitting the report of the appraisal identified 20 "Appraisal Improvement Areas". The inspectors examined the licensee's mechanism for tracking corrective actions, where such actions were indicated, the overall status of corrective actions and specific corrective actions in the case of 5 areas.

A total of 16 of the 20 areas were initially incorporated into the Action Item Reporting System (AIRS), essentially a tickler system which was the predecessor of the NEOCR discussed in Report Details Section 2. The initial system was later incorporated into the NEOCR system. Four of the specific items were not incorporated in the AIRS listing having been accomplished before entry in the system. Action on two of the items omitted from the list was verified. A current NEOCR printout list of the 16 remaining items noted that all items had been closed (action completed). Action on 5 of the 16 items was examined. The action taken had been appropriate and was complete in all cases.

4. Emergency Detection and Classification and Protective Action Decision Making

The inspectors examined the licensee's ability to detect and classify emergency conditions. Based on a review of EIPs S01-VIII-i and SO 2/3-VIII-1, RECOGNITION AND CLASSIFICATION OF EMERGENCIES and interviews with six (6) Shift Supervisors, the Emergency Planning Manager and one Emergency Planning Engineer, the licensee could effectively detect and classify emergency events in accordance with 10 CFR 50 requirements.

Emergency Action Levels (EAL) were determined correctly by each shift supervisor during walkthrough demonstrations. Each shift supervisor was generally familiar with the EIPs and each understood that he was charged with the responsibility to immediately classify events and initiate emergency actions. Licensee procedures required at least two (2) shift supervisors on site at all times (one at Unit 1 and one at Units 2/3). Upon declaration of an event the declaring shift supervisor was required by the EIPs to assume the duties of the Emergency Coordinator (EC) until relieved.

Based on a review of EIP S0123-VIII-10, EMERGENCY COORDINATORS DUTIES the inspectors determined that the licensee had clearly defined the times required for event notification. A walkthrough demonstration indicated that each EC in conjunction with the Shift Communicator (three tested) could make the notifications within the required time.

During a review of EIP S01-VIII-1 RECOGNITION AND CLASSIFICATION OF EMERGENCIES, tab D1, LOSS OF SAFETY FUNCTIONS, UNUSUAL EVENT, paragraph 1 refers to EMERGENCY OPERATING INSTRUCTION (EOI) S01-1.7-1 "Loss of Off Site Power". A review of S01-1.7-1 found that S01-1.7-1 had been cancelled on October 22, 1983 and was superseded by S01-1.0-60/61. The inspectors reviewed S01-1.0-60/61 and could not find any reference in this EOI that would alert the user to check the EIPs for implementation. The inspector reviewed S01-1.0-40, "Steam Generator Tube Rupture", and found that page 25 did direct the user to the EIPs for classification of the event. In review of S01-1.0-50, "Anticipated Transient Without Scram", the inspectors could not find any reference in the procedure that directed the user to the EIP.

With the assistance of the SONGS staff the inspectors determined that procedures S01-1.0-50, 60 and 61 would normally be entered from Procedure S01-1.0-10 which included a statement on the Administrative Function page that provided guidance to the user to check the EIP's for classification.

Based on a review of the controlled copy of the EIP's located in the Unit 2/3 control room, in conjunction with an interview of a Shift Supervisor, the following apparent problems were noted:

1. The EIP book is cluttered with many document control pages that cancel old or superseded procedures, making use difficult and sometimes slow.

2. Temporary Change Notices (TCN) are placed in the EPIP book at the beginning of the applicable procedure rather than by incorporating the change into the procedure. This may cause difficulty during use and increase the probability that a misclassification could occur if the TCN is not examined.
3. A copy of the Emergency Telephone Directory was included in this copy of the EIPs and not in other copies. The inspectors could not determine why the directory was located in this copy and not in other copies.
4. Procedure S0123-VIII-204 EVACUATION NON-ESSENTIAL PERSONNEL was listed in the index dated 3-8-83 as S0123-VIII-203.
5. Procedure S0123-VIII-0.201 was out of proper sequence in the EPIP Book.

The inspectors noted that the EPIP (control copy) labeled S0123-VIII located at the NRC office did not contain a procedure for RECOGNITION AND CLASSIFICATION OF EMERGENCIES. It is the licensee's responsibility to maintain all controlled copies up to date by site document control procedures.

The inspectors reviewed S0123-VIII-10 EMERGENCY COORDINATOR DUTIES, and S0123-VIII-20, EMERGENCY PLANNING COORDINATOR DUTIES, and interviewed the Emergency Planning Coordinator and determined that:

1. The licensee was capable and prepared to issue on and off site recommendations that would be timely and would provide for effective action to protect personnel both on and off site.
2. Licensee personnel understood the relationship between plant conditions, possible offsite consequences and the effectiveness of protective measures.
3. The licensee had a staff onsite continuously with responsibility for accident assessment and protective action recommendations.
4. Procedure S0123-VIII-10, EMERGENCY COORDINATOR DUTIES, did not require protective action recommendation for sheltering within a 2 mile radius and 5 miles downwind during a general emergency. A revision to S0123-VIII-10 had been prepared by the site emergency planning staff and was waiting final approval by the Deputy Station Manager in accordance with the Technical Specifications.

During interviews and walkthroughs with six Shift Supervisors, each of whom was charged by the licensee's EPIP to become the EC in the event of an emergency, the inspectors found that all were capable of making protective action recommendations based on criteria provided in the EIPs. Each Shift Supervisor interviewed indicated to the inspectors a desire for additional training and guidance in the use of the EIPs as specifically related to the EC duties in addition to the general training provided to all the Nuclear Emergency Response Team (NERTs) members. One shift supervisor stated that he had missed the last NERTs training due to

a conflicting meeting. The inspectors concluded from these interviews a reluctance on the part of the Shift Supervisors (SS) to recommend protective actions based solely on plant conditions but rather preferred to wait for dose projections from the Health Physics Leader (HPL).

The inspectors reviewed the licensee's revised Emergency Planning Training Program, Volume I and Volume II. The program is organized for the training of specific groups (e.g., Technical Support, Operations Support, Health Physics Support, etc). All the lesson plans are in place and appeared to cover the necessary topics. The revised program became effective April 1, 1983. The program required that each NERT member receive training on an annual basis and incorporated a schedule that provided for training on a quarterly basis, for all the emergency response team members. The interviews with six Shift Supervisors established that all understood their responsibilities and could perform their duties.

The inspectors conducted an examination of the Technical Support Center (TSC) facilities to evaluate readiness for operation and completeness of the materials and information available for use in classification of emergency events. All required equipment and information appeared to be placed and organized for effective and timely use by the TSC staff with the exception that the Ivory Phone, Plant Emergency Phone (PERT), which provides for direct communication between inplant control centers during an emergency was missing.

The inspectors discussed with representatives of SCE's Nuclear Affairs and Emergency Planning (NA&EP) group the requirements of 10 CFR 50, Appendix E, Part IVB. The licensee had provided copies of Appendix F of the Emergency Plan, Manual of Emergency Events, to state and local governmental authorities at a meeting of the Interjurisdictional Planning Committee. State and local governmental authority representatives were asked to comment informally after reviewing Appendix F.

The inspectors examined Appendix F and found it to be an excellent laymans discussion of the emergency action levels (EAL) contained in EPIPs S01 and S02/3-VIII-1 RECOGNITION AND CLASSIFICATION OF EMERGENCIES. Appendix F, however, did not specifically identify the EAL's contained in the EPIPs. This matter was discussed with licensee representatives during the exit interview.

#### 5. Notifications and Communications

The inspectors examined the adequacy and capability of the system maintained by SONGS for communication among SONGS personnel and notifying and communicating with offsite supporting agencies and authorities, and the population within the EPZ in the event of an emergency.

The SONGS system for Notifications and Communications was evaluated against the criteria contained in NUREG-0654/FEMA-REP-1, Revision 1 and 10 CFR 50, Appendix E.

SONGS communications capabilities included multiple systems and backups for transmitting and receiving information throughout the course of an emergency. Systems included telephones, UHF radio and public address systems for communications onsite. A dedicated telephone system (Interagency Telephone System) was provided for continuous communications

between the site, EOF, and all local governmental agencies. A dedicated telecommunication system (Orange County telecommunications system) was provided for hard copy communications between the site, EOF, and all local governmental agencies. Public and private telephone systems and a VHF radio system were provided for communication from the site to Camp Pendleton. The plant had microwave telephone communications to SCE and SDG&E, independent from the Bell telephone system. The plant also had an emergency evacuation alarm system to warn plant personnel for assembly and evacuation.

SONGS performance relative to the criteria was determined by interviewing selected Shift Communicators, the AWS Operator Supervisor, the Lead AWS Operator, and AWS Operators. The inspectors examined EPIP's:

SO123-VIII-30.1, SHIFT COMMUNICATORS DUTIES;

SO123-VIII-30.2, EMERGENCY PUBLIC ADDRESS ANNOUNCEMENTS and

SO123-VIII-70, ADMINISTRATIVE LEADER DUTIES, Section 7.2.

The inspectors verified that notification procedures existed consistent with the emergency classification and emergency action level schemes of part II.D.1 and 2 and II.E.1 and 2 of NUREG-0654. Message verifications were accomplished by LCD readout at the AWS operator's PBX console or by telephone callback. Adequate instructions for alerting, notifying, and activating NERT's were contained in EPIPs SO123-VIII-30.1, SHIFT COMMUNICATORS DUTIES and SO123-VIII-70, ADMINISTRATIVE LEADER DUTIES. The procedures addressed the appropriate emergency personnel and organizations, and the call lists and telephone numbers were current.

The inspector examined the content of the initial emergency and followup messages to offsite agencies and determined that they conformed to the evaluation criteria of Part II.E.3. and 4. of NUREG-0654. The prompt notification system (including provisions for prompt instructions to the public within the EPZ) was in place.

Communications equipment and procedures were contained in the AWS Switchboard Operator's office, the TSC, and the EOF consistent with the needs for onsite and offsite emergency communications. Operability checks of equipment in the TSC and EOF were performed. All equipment checks verified the equipment to be operable. Monthly communications equipment test logs were examined to verify that equipment checks and drills had been routinely performed in compliance with 10 CFR 50, Appendix E, Parts IV.E.9. and IV.F.3.

Primary and backup communications systems were examined to ensure that continuous communications links were available. Communications systems were provided with diverse power sources located in separate plant areas to minimize losses from localized events and should continue to operate in the event of localized power failures. An unannounced notification check was requested and observed to determine that notifications were carried out correctly. This was performed correctly by the Lead AWS Operator.

## 6. Changes to the Emergency Preparedness Program

The inspectors reviewed the changes in the Emergency Plan (EP), EIPs and the methods used to effect those changes. EP and EPIP changes are initially documented on Form 109, Routing and Document Control. The form identifies the applicable unit, document author, reason for review or change and provides for distribution of the document being revised. A parallel review process is used to speed the review process. Reviews are performed only by responsible individuals/groups directly involved with the proposed change. A total of 10 days is provided for the review process. The author is responsible for the resolution of comments with the involved individual/group. Following final preparation, the revised document and Form 109 identifying individual/group reviews, comments and resolutions are reviewed by the Manager Emergency Preparedness. The complete package is submitted to the Deputy Station Manager for review and approval.

Temporary changes to EIPs, using Temporary Change Notices (TCN) can be accomplished on the basis of a review and approval process involving the affected unit(s) Shift Supervisor(s) and the Manager Emergency Preparedness. Up to 10 TCNs can be applied to a single procedure in one year before procedure revision is required. Procedures are reviewed and revised, incorporating any TCNs, on an annual basis.

Proposed changes to plant equipment or facilities are reviewed and documented by the Configuration Control Department and circulated to all Divisions. This mechanism provides the opportunity to identify the impact of the proposed change on procedures. Based on the inspectors review of equipment changes, such changes have been incorporated into the EP and EIPs, in a timely fashion.

Beginning in late 1982 the EIPs were revised from a task oriented to a functional responsibility format. The procedure numbers identify the responsible organization:

<u>Procedure Series</u>	<u>Responsible Group</u>
10	Senior Management
20	Emergency Preparedness
30	Operations
40	Health Physics
50	Technical
60	Security
70	Administration
80	Maintenance
90	(to be Compliance)

In addition, the EIPs are uniformly organized on the basis of specific section designations for certain activities:

<u>EPIP Section No.</u>	<u>Activity</u>
1	Activation
2	Notification
3	Evacuation
4	Protective Action Guides
5	Event Classification
6	Exposure Control
7	Emergency Response Coordination
8	EOF Coordination
9	Unaffected Unit

The first pages of each EPIP, applicable to an individual filling a designated emergency response position (e.g. SC123-VIII-10 EMERGENCY COORDINATOR DUTIES) provides a Procedure Coordination section which briefly addresses Primary Responsibility, Objective, Precautions and Attachments.

Since the Emergency Preparedness Appraisal of October 26 - November 6, 1981, changes have occurred in the management of the emergency preparedness organization. Discussion with licensee personnel established that these changes had not had an adverse effect on emergency preparedness activities and that licensee management had supported emergency preparedness efforts.

The licensee had established a Control Distribution Matrix (CDM) to assure that new or revised copies of procedures were, distributed to controlled copies of manuals. Uncontrolled copies of new or revised procedures are distributed to personnel at the working level to assure that they have been informed of procedural changes.

#### 7. Knowledge and Performance of Duties (Training)

The inspectors examined the onsite Emergency Plan Training program. The training program for Nuclear Emergency Response Team (NERT) members is described in Training Program Description-ERT-1 Revision 0, Emergency Plan Training, approved in May 1983. The training cycle under the revised training plan began in April 1, 1983. All persons requiring training are to have completed the prescribed training by April 1, 1984. According to the Training Program Description, ERT-1, until the prescribed training is completed, training accomplished under the requirements of Training Memorandum 10-81 and/or participation in a successful drill or exercise meets the training requirements.

In addition to the Emergency Plan Training program, the licensee had established a requirement for site access badging. A site access badge did not permit access to controlled access areas. As a part of the site access badging process, training in recognition of and response to emergency signals was provided.

The Emergency Plan Training program identifies 13 functionally oriented Emergency Plan Training Groups (e.g. Emergency Response Management Personnel, Health Physics Support Personnel, Maintenance Support Personnel). Emergency response organizational positions or groups are specifically assigned to the functionally oriented training groups. The Training Program provides a curriculum for each of the training groups.

The Nuclear Training Division (NTD) had developed lesson plans and visual aids to support the training of the 13 training groups. In addition the NTD is proceeding with a computer based adaptation of the training for each of the groups. The computer system, a vendor supplied instructional computer system, permits development and use of proprietary training programs by users of the system. The computerized training program permitted individual training, testing (80% passing), retraining challenge testing (80% passing) and retraining if a passing challenge score was not achieved. Access to the computer training system was controlled by NTD on a password basis which limited trainees to specific courses and times for training completion. A maximum of five test questions were randomly selected by the computer and presented. A score of 80% was required to pass. In the event that the examinee misses more than one question the test is terminated and retraining begins. The computer recorded times used in training/testing by each user, test scores and statistical data on performance of test questions for test validation purposes. The computer will also prepare instructor's lesson plans and transparencies for standup lecture presentation of the training programs. At the time of the inspection, 10 computer terminals were available for use with the computer based training program. Based on the result of the inspection, the licensee had established an emergency response training program as required by 10 CFR 50.47(b)(15).

The licensee had established a computer based system of records which identified Attainment Histories with respect to emergency preparedness training. The record identified the individual, course title, training date, pass or fail, test score and attend or exempt for training not requiring testing (e.g. table top exercise).

Using an emergency recall list for SONGS Unit 2/3 the training status of the Station Management Support group was determined from the Attainment History record. Approximately 20% of this group had not completed the revised training described in Training Program Description -ERT-1. It was noted that essentially all of the individuals filling primary, first and second alternate response positions, had been trained. Based on the results of the inspection, the amount and type of training provided appeared to be appropriate.

In order to speed response by personnel in the event of an emergency, the licensee had established an identification system (yellow dots) on the badges. Such badges would permit personnel to:

1. Pass through California Highway Patrol road blocks; and
2. Pass through any onsite security access point during an emergency. (During drills and exercises security is not to be relaxed, yellow dots permitting "head of line" privileges only).

SCE had established specific Departmental staffing requirements based on NUREG-0654 Table B-1, Minimum Staffing Requirements. Departmental supervisors were permitted to designate others in addition to the SCE specified Departmental requirements. At the time of the inspection approximately 1,200 individuals had been issued badges with yellow-dots.

Approximately 700 of these designated persons had received emergency preparedness training in accordance with ERT-1 at the time of the inspection. The licensee was aware of the apparent discrepancy between those authorized access and those trained. A review of the procedure involved in the issuance of yellow-dots and the training implications attendant on such issuance had been initiated.

Based on interviews with Shift Supervisors (identified in Report Details Section 4) and other emergency response personnel, the licensee staff appeared to understand and be competent to discharge their assigned duties.

#### 8. Post Accident Measurements and Instrumentation

The SONGS system for assessing the magnitude of or potential for a release of radioactive material and for continuously assessing the impact of a release consisted of procedures for calculation of the source term or potential source term based on readings from installed plant radiological and effluent monitors, and current meteorological data. Radiological and meteorological instrumentation described in the Emergency Plan and EIPs were located in the control room. The instrumentation was operable and within calibration.

The capability to obtain the required data and carry out the required calculations was established by interviewing Health Physics Foremen, inspecting the radiological and meteorological instrumentation used for the source term and dose assessment calculations and touring the facilities where the calculations were performed. The inspectors examined procedures:

S01-VIII-40-100, SOURCE TERM AND DOSE ASSESSMENT;

S023-VIII-40-100, SOURCE TERM AND DOSE ASSESSMENT

S0123-VIII-40.1, HEALTH PHYSICS FOREMEN DUTIES.

The inspectors verified that detector efficiencies and conversion factors had been determined for all radiological monitors used in the source term and dose projection calculations. Procedures were in place to relate monitor readings to radioactivity concentrations, release rates and total activity. Procedures were also in place that provided for alternative methods utilizing portable radiological survey instrumentation in the event that the primary systems were inoperable. Inspections of the equipment and checks of maintenance records indicated that the instrumentation was being properly and routinely maintained.

The instrument readouts in the control room were properly located to ensure accessibility under accident conditions. Properly calibrated portable instruments were located in the TSC emergency kit. Meteorological system routine maintenance records were reviewed to verify adherence to preventative maintenance schedules. Inoperable equipment had been replaced or repaired. The National Weather Service verified that information on meteorological conditions for the SONGS region was available. Inspection of the meteorological tower facilities indicated

that the base of the tower was free of obstructions which might interfere with measurements. A fence had been constructed around the tower to prevent parking near the towers. It was verified that meteorological data readout and remote interrogation was available in the Control Room, TSC, and the Emergency Operations Facility (EOF).

The procedures for source term and dose calculations, using the post-accident monitoring instrument readings, were reviewed with personnel responsible for performance of those duties during an emergency. As a result of this review it was determined that additional training or simplification of the source term work sheet was necessary to assure that all assigned personnel could perform the calculations unerringly and in a timely fashion.

9. Emergency Worker Protection

The SONGS emergency worker protection system included provisions for protective equipment, facilities, and procedures for protecting onsite emergency workers. Protective equipment included full face respirators, SCBAs, anti-contamination clothing, decontamination supplies, high and low range personnel dosimeters, radiation detection instrumentation, and supplies for establishing radiation control zone boundaries. Adequate numbers of respirators were contained in the emergency kits located in the Control Room, TSCs, OSCs, and the EOF. Decontamination supplies and shower facilities were available onsite and at the EOF. The EOF shower drained to a holdup tank. Procedures were established to assure appropriate radiation protection of personnel during an emergency.

The capability to provide appropriate protection of emergency workers was established by interviewing the Respirator Coordinator, the Health Physics Foremen, the EOF Emergency Planning Coordinator, and inspecting the contents of the emergency kits contained in the Control Rooms, TSCs, and the EOF. The inspectors examined EIPs and procedures:

SO123-VIII-10, EMERGENCY COORDINATOR DUTIES;

SO123-VIII-20, EMERGENCY PLANNING COORDINATOR DUTIES;

SO123-VII-2.0, RESPIRATORY PROTECTION PROGRAM;

SO123-VII-2.6, INVENTORY AND CONTROL OF RESPIRATORY PROTECTIVE EQUIPMENT  
and

SO123-VIII-40, HEALTH PHYSICS LEADER DUTIES.

The inspectors verified that provisions had been made to have someone available onsite 24 hours per day who had the authority to authorize emergency exposures in excess of 10 CFR 20 limits. The emergency exposure limits were consistent with Environmental Protection Agency guidance.

Sufficient numbers of approved respirators and SCBAs were contained in the emergency kits to protect workers who would remain onsite during an emergency. During the inspection it was noted that the air purifying

respirators contained in the Unit 1 TSC and OSC, and the EOF had not been inspected monthly as required by the respiratory protection program procedures. The respirators in the EOF were last inspected and tagged on April 1, 1983. The respirators in the Unit 1 TSC, and OSC were last inspected and tagged on November 1, 1983.

Adequate quantities of anti-contamination clothing were contained in the emergency kits located onsite and at the EOF. Adequate personnel decontamination supplies, equipment, and facilities were available onsite and at the EOF. It was determined from the examination of the EIPs that appropriate radiation protection procedures were in place and would be implemented in the event of an emergency.

#### 10. Exit Interview

The scope and results of the inspection were discussed with the licensee representatives denoted in Report Details Section 1 at the conclusion of the inspection. No attempt was made to categorize the inspection findings at that time, however, the licensee was subsequently informed that no significant deficiencies or violations of NRC Regulations had been identified.

The licensee was informed that the inspectors had gathered the impression during interviews with Shift Supervisors/Emergency Coordinators that they were reticent to make protective action recommendations solely on the basis of plant parameters as identified in the Report Details Section 4. The anticipatory approach to protective action recommendations implied by NUREG-0654, Appendix 1 was identified as a matter for management consideration and possible reinforcement with appropriate personnel. The licensee representatives agreed to evaluate this concern and take appropriate action.

The requirement for review of emergency action levels (EAL) (10 CFR 50 Appendix E, Part IV B) by State and local governmental authorities was discussed. The SONGS MANUAL OF EMERGENCY EVENTS, Appendix F to the licensee's Emergency Plan, was identified as an excellent layman's discussion of EALs contained in the EIPs. It was noted, however, that Appendix F did not specifically identify the EALs used by the licensee. The inspectors commented that the State and local governmental authorities should have an opportunity to examine the EALs actually used, EIPs SO1 and SO2/3-VIII-1 RECOGNITION AND CLASSIFICATION OF EMERGENCIES, and understand the relationship between the EIPs and Appendix F. The licensee should retain a record of the annual review by the State and local governmental authorities.

The licensee was informed that during the inspection it had been noted that the Emergency Plan did not contain a cross reference to the criteria of NUREG-0654/FEMA-REP-1, Revision 1 as recommended in section I.J., Form and Content of Plans, of that document. The licensee was informed that inclusion of such a cross reference in the Emergency Plan during the annual review of the plan, ongoing at the time of the inspection, would resolve the concern (83-24-01).

The inspectors commented that the examination of training records indicated that significant numbers of persons had not completed the emergency response training programs as defined in ERT-1 if the training requirements were extended to individuals issued yellow dot access authorization. The inspectors noted that the licensee's QA staff had identified failure to complete the prescribed training in Audit Report SCES-53-83, November 23, 1983. The licensee's representatives stated that emergency response training was to be completed by March 31, 1984, the end of the first training cycle under ERT-1. The licensee stated that administrative controls and training requirements for yellow-dot holders would be examined.

The licensee was informed that during the inspection certain individuals had failed to demonstrate an unerring skill in performing manual offsite dose calculations, an EPIP designated responsibility. The inspectors noted that the individuals whose performance was less than perfect had not received the required ERT-1 prescribed training.