

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-206/82-33
50-361/82-33

Docket No. 50-206, 50-361 License No. DPR-13, NPF-10 Safeguards Group _____

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

Facility Name: San Onofre Unit 1 and 2

Inspection at: San Clemente, California

Inspection conducted: October 25-28, 1982 and Subsequent Telephone Conversation
on November 2, 1982.

Inspectors: G. P. Yuhos 11/18/82
G. P. Yuhos, Radiation Specialist Date Signed

Approved by: GP Yuhos For 11/18/82
F. A. Wenslawski, Chief, Reactor Radiation Protection Section Date Signed

Approved by: H. E. Book 11/18/82
H. E. Book, Chief, Radiological Safety Branch Date Signed

Summary: Inspection on October 25-28, and Subsequent Telephone
Communication on November 2, 1982 (Report Nos. 50-206/82-33, 50-361/82-33)

Areas Inspected: Routine unannounced inspection of radiation protection activities at Units 1 and 2 including: radiation protection training; procedures; exposure control; posting of notices to workers; power ascension surveys at Unit 2; and followup to previous inspection findings involving control of high radiation areas. The inspection involved 34 hours onsite by a regionally based inspector.

Results: Of the three areas inspected, one apparent item of noncompliance was identified (failure to post a notice to workers, 10 CFR 19.11(b), paragraph 3).

DETAILS

1. Persons Contacted

- *H. Ray, Station Manager
- *J. Curran, Quality Assurance Manager
- *W. Moody, Deputy Station Manager
- *P. Croy, Configuration Control and Compliance Manager
- *P. Knapp, Health Physics Manager
- *H. Mathis, Nuclear Training Division Manager
- A. Talley, Material Administration Manager
- *R. Gray, Health Physics Supervisor Unit 2/3
- *G. Noel, Nuclear Training Division
- *C. Bostrom, Nuclear Training Division
- J. Ervin, Instructor Blue Badge Training
- R. Richmond, Instructor Red Badge Training
- E. Bennett, Quality Assurance Engineer
- K. Swoope, Health Physics Engineer
- T. Cooper, Health Physics Engineer

*Indicates those individuals attending the exit interview on October 28, 1982.

In addition to the individuals noted above, the inspector met with and held discussions with other members of the licensee's and contractor's staffs.

2. Licensee Action on Previous Inspection Findings

(Closed) (50-206/82-09-01, 82-19-01) Noncompliance, failure to post a high radiation area. Health Physics Procedure (HPP) S0123-VII-7.4, "Posting and Access Control," Revision 1 effective October 5, 1982 was reviewed and found to contain specific guidance consistent with 10 CFR 20.203 and Technical Specification 6.11. During a tour of the Unit 1 containment building on October 27, 1982 independent measurements made using an NRC portable radiation survey instrument (RO2, SN. NRC 009154 calb. due January 6, 1983) found no examples of incorrect posting or control of high radiation areas. The inspector had no further questions regarding this matter.

(Open) (50-361/82-26-02) Inspector identified item involving control of very high radiation areas. In the licensee's September 23, 1982 response to this inspection finding, five specific actions were described to address this issue. These actions have not been completed nor has the licensee developed a schedule for completion at this time. This matter will be reviewed in a subsequent inspection.

3. Radiation Protection Activities

A. Radiation Protection Training (Initial)

The following documents were reviewed to determine compliance with the requirements expressed in 10 CFR 19.12, "Instructions to Workers":

- Nuclear Training Division Memorandum 9-81, "General Employee Indoctrination".

- SCE, San Onofre Nuclear Generating Station, Nuclear Training Division, A Guide to the New Employee, Training Handout/TP-5000-A, August 1, 1982/Rev. 4.
- SCE, San Onofre Nuclear Generating Station Nuclear Training Division, Radiological Safety, Training Handout TH-5005-A, August 1982/Rev. 3.
- Examinations associated with the Radiation Familiarization and Radiological Safety classes.
- Records of training for five individuals selected at random by the inspector.

The inspector attended the Radiation Familiarization class on October 25, and portions of the Radiological Safety class on October 27, 1982. The inspector discussed important aspects of radiation safety training with class participants, instructors and their supervisor.

The following observations were discussed with the supervisor responsible for this area.

1. TP-5000-A, Rev. 4 includes a copy of Form NRC-3 (1-80). The inspector provided the licensee a copy of Form NRC-3 (6-82) which became effective October 12, 1982.
2. The "Radiation Familiarization" classroom presentation did not include mention of workers responsibility or USNRC Regulatory Guide 8.13 information. This information was included in the handout. The instructor had been presenting this class for about two months and had not been audited by supervision to evaluate the effectiveness of the instruction.
3. Tests for the Radiological Safety class could be improved to demonstrate that students initially understood the risks associated with occupational exposure. Discussion with students indicated that the instructor had been effective in communicating this point.

No items of noncompliance or deviations were identified in this area.

B. Radiation Protection Training and Retraining

The following documents were reviewed to determine compliance with Section 6.4 of Units 1 and 2 Technical Specification:

- Section 5.5 of ANSI 18.1-1971.
- Station Order S-A-126, "Personnel Training" Rev. 8, June 24, 1981.

- Station Order S0123-A-126, "Personnel Training", Rev. 0, March 19, 1982.
- Nuclear Training Organization Memorandum 1-81, "Radiation Protection Training and Requalification Program", Rev. 1, August 21, 1981.
- Nuclear Training Organization Memorandum 5-81, "Assistant Health Physics Technician Training and Retraining Program".
- Memorandum, "HP/Chem Training Internal Reporting Structure", August 26, 1982
- Memorandum NT82-0308, "Long-Term Health Physics Training Schedule"
- Health Physics/Chemistry Instructor Guide
- Memorandum, "Goals and Objectives for Health Physics and Chemistry Training through 1982"
- SONGS Health Physics Information Notice, Number 1-82, September 29, 1982
- Program of Instruction (POI) and Qualification Manual (QM) for Assistant Health Physics Technician
- Training records for several individuals selected by the inspector.

The inspector interviewed the Nuclear Training Division Manager, Health Physics Manager, HP/Chemistry Training Administrator, three Health Physics Foremen, and one Health Physics Technician regarding the training program.

Based on this review the following observations are noted.

- The HP/Chemistry Training is well organized, staffed by qualified individuals, and is engaged in development and implementation of meaningful training programs.
- Cooperation between the Health Physics Department and Nuclear Training Division has improved since the last review of this area.
- The Health Physics Manager has implemented a communication tool, "SONGS Health Physics Information Notice" which could be effective in continuing education of the plant staff.
- Foremen and technicians report an increased emphasis on radiation protection training and generally feel the training provided is improving in quality and relevancy.
- Technical Specification 6.4 states in part that a retraining and replacement program that meets or exceeds the requirements and recommendations of Section 5.5 of ANSI 18.1-1971 shall be

maintained under the direction of the Manager, Nuclear Training. S-A-126 is inconsistent with this statement and does not represent the training organization presently established. S0123-A-126 is also inconsistent in that it assigns the responsibility for ANSI 18-1 Training to the Station Manager rather than the Manager Nuclear Training. It appears S0123-A-126 was intended to replace S-A-126, however, with the issuance of S0123-A-126 the procedure was not cancelled.

- From discussions with the HP/Chemistry Training Administrator the inspector concluded that a clearly defined program to assure compliance with Section 5.5 has not been developed. For example: radiation protection retraining for Health Physics Technicians, Foreman, and Supervisors has no defined beginning, end, or content to assure that at least the ten topics presented in Section 5.5 are periodically covered. However, review of training records indicate that appropriate training is being provided at this time.
- Two significant programs (Advanced Radiation Protection Training, Professional Radiation Training) addressed in training memorandum 1-81 have not yet been established.

No items of noncompliance were identified, however, inconsistency between T.S.6.4 and Station Orders S-A-126 and S0123-A-126; definition of the retraining program; and radiation protection training for supervisors and professionals will be reviewed in a subsequent inspection (50-206/82-33-01, 50-361/82-33-01).

C. Radiation Protection Procedures

The following procedures were reviewed to determine compliance with T.S. 6.8, "Procedures" and 6.11, "Radiation Protection Program."

<u>Health Physics Procedure No.</u>	<u>Title</u>	<u>Revision/Date</u>
S0123-VII-1.0	Health Physics Manual	0/November 5, 1981
S0123-VII-3.0	ALARA Job Review, TCN 1	2/July 29, 1982
S0123-VII-3.1	ALARA Design Review	0/December 16, 1981
S0123-VII-4.6	Radiation Exposure Standards	1/August 24, 1982
S0123-VII-4.1.2	External Radiation Dosimetry	0/September 18, 1982
S0123-VII-5.0	Instrument Calibration Program	0/March 19, 1982
S0123-VII-7.4	Posting and Access Control	1/October 5, 1982
S0123-VII-9.9	Radiation Exposure Permit Program	0/September 13, 1982

No items of noncompliance or deviations were identified.

D. Tours of the Facility

During tours of the facility the inspector observed implementation of the procedures noted above and compliance with the requirements expressed in 10 CFR 19, 10 CFR 20 and Technical Specifications.

Radiation, contamination, and airborne activity survey records associated with Unit 1 for October 25-27, 1982 were reviewed.

On October 27, 1982 between 8:00 PM and 11:45 PM the inspector and the Health Physics Manager toured the Unit 1 restricted areas including the containment structure. Independent measurements by the inspector confirmed the adequacy of the licensee's radiation surveys, posting, and control of radioactive materials. Sufficient portable radiation survey equipment was available and appeared calibrated in accordance with S0123-VII-5.0. Implementation of the Radiation Exposure Permit Program (REP) was observed. In one case, the inspector questioned two workers preparing to enter the containment on REP No. 8307, "Regen HX, 14' Northwall". From discussions with these workers and review of the REP it appeared that, should work proceed, a violation of S0123-VII-3.0 and 9.9 would result, since radiation surveys of the work area were not attached and the required ALARA review had not been completed on the REP. The Health Physics Manager delayed initiation of this REP until the identified problems were resolved. The inspector also cautioned the licensee representative regarding the number of hoses and equipment which are fed through the restricted area fence. These items, if not properly surveyed, present potential pathways for release of low level radioactive material.

An inventory of high radiation area access keys made at both Unit 1 and 2 Health Physics Supervisor's offices found compliance with S0123-VII-7.4.

10 CFR 19.11, "Posting of notices to workers." states:

- "(a) Each licensee shall post current copies of the following documents: (1) The regulations in this part and in Part 20 of this chapter; (2) the license, license conditions, or documents incorporated into a license by reference, and amendments thereto; (3) the operating procedures applicable to licensed activities; (4) any notice of violation involving radiological working conditions, proposed imposition of civil penalty, or order issued pursuant to Subpart B of Part 2 of this chapter, and any response from the licensee.
- (b) If posting of a document specified in paragraph (a) (1) (2) or (3) of this section is not practicable, the licensee may post a notice which describes the document and states where it may be examined.

- (c) Each licensee and applicant shall post Form NRC-3, (Revision 6-82 or later) "Notice to Employees," as required by Parts 30, 40, 50, 60, 70, 72, and 150 of this chapter.
- (d) Documents, notices, or forms posted pursuant to this section shall appear in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from any particular licensed activity location to which the document applies, shall be conspicuous, and shall be replaced if defaced or altered.
- (e) Commission documents posted pursuant to paragraph (a)(4) of this section shall be posted within 2 working days after receipt of the documents from the Commission; the licensee's response, if any, shall be posted within 2 working days after dispatch by the licensee. Such documents shall remain posted for a minimum of 5 working days or until action correcting the violation has been completed, whichever is later."

During the October 27, 1982 tour the inspector noted that copies of Form NRC-3 (6-82) provided by the inspector on October 25, had been posted at the entrances to the protected area, at Door 16, and to Access Point No. 3. A notice dated January 5, 1978 listing 10 CFR 19, 10 CFR 20, Unit 1 license and operating procedures was posted at the protected area access points. Old Notices of Violation were posted at Door 16 and Access Point No. 3.

The inspector informed the Health Physics Manager that the 1978 notice did not fully comply with 10 CFR 19.11(b) in that the notice contained no description of 10 CFR 19 and 10 CFR 20 and also did not contain reference to Unit 2's license, license conditions or operating procedures. The inspector reminded the Health Physics Manager that the issue of proper 10 CFR 19.11 posting had been brought to the licensee's attention during previous inspection visits. The Health Physics Manager stated that he had taken actions to correct the posting deficiencies observed. The inspector reviewed these actions in an effort to determine why the licensee had failed to comply with the requirement. The following sequence is noted:

- August 6, 1982, "HP Individual Task Assignment PJK 32," the task description stated: "Take all required action to assure that the 'Posting of Notices to Workers' provisions of 10 CFR 19.11 are met." Task due date was stated as August 20, 1982.
- August 12, 1982, Memorandum from Compliance and Configuration Control to Administration advising them of 10 CFR 19.11 requirements and need to address these in Clerical Procedure S0123-VI-1.12, "Required Bulletin Board Postings".

- August 16, 1982, Memorandum from Compliance and Configuration Control to Administration advising them that they are assigned responsibility for this area.
- August 17, 1982, Memorandum from Health Physics to Administration providing technical guidance on how to comply with 10 CFR 19.11 and 10 CFR 21.6, a draft notice, and draft revision of S0123-VI-1.12.

Review of this memorandum indicates the draft notice would not comply with 10 CFR 19.11(b) and the procedure would not assure compliance with 10 CFR 19.11(c)(d) as published in the Federal Register Vol. 47, No. 135 Wednesday July 14, 1982, FR 30453. The effective date of this revision of 10 CFR 19.11 was October 12, 1982. The revision requires more extensive posting of Form NRC 3 (6-82).
- August 19, 1982, Corrective Action Requests (CAR) S01-P-573 and S01-P-574 were issued identifying noncompliance with 10 CFR 19.11 and requesting a response by September 20, 1982.
- August 26, 1982, Memorandum from Health Physics to Administration providing additional guidance on this issue including the need to incorporate Unit 2 license in the notice and procedure was identified.
- September 10, 1982, Memorandum from Health Physics to Administration reviewing previous correspondence on this issue including Quality Assurance CARs and clearly identifying that noncompliance continues to exist and stating the certainty of citation by NRC if the condition is not immediately corrected.
- September 16, 1982, Memorandum from Compliance and Configuration control to Quality Assurance requesting extension of due date for CARs S0123-P-573, 574 to October 20, 1982. Extension was granted on September 18, 1982.
- October 22, 1982 a Health Physics Engineer toured the site and found corrective action had not been taken.
- October 25, 1982 Memorandum to Compliance and Configuration control from Quality Assurance listing CARs S01-P-573 and 574 as delinquent.

Based on this review the inspector concludes: That the licensee was aware that they were in noncompliance from mid August 1982; that they were not aware of new requirements pursuant to 10 CFR 19.11 (c) (d) and 10 CFR 50.7 due to be implemented by October 12, 1982; that they did not respond to Quality Assurance findings in a timely manner such that the criteria of 10 CFR 2, Appendix C, paragraph IV.A. could be applied.

Accordingly, failure to post notices to workers represent noncompliance with 10 CFR 19.11(b) (50-206/82-33-02/50-361 82-33-02).

4. Unit 2 Power Ascension Program

The inspector reviewed Special Chemical Procedure SPC-002, "Unit 2 Power Ascension Test Program, Chemistry Support", Revision 0, dated August 26, 1982 and found it to be consistent with section 14.2.12.92 of the Unit 2/3 Final Safety Analysis Report.

On October 26, 1982 the inspector reviewed the licensee's biological shield survey data collected at 20% power pursuant to S023-VII-9.4. After review of the data the inspector prepared to make several confirmatory measurements of selected points on each level of the containment using NRC R02, Serial No. 009154, calibrated October 14, 1982 and NRC PRS-2, Serial No. 006381, calibration February 24, 1982.

Once inside the containment the NRC PRS-2 failed. The inspector borrowed a licensee PRS-2 Serial No. 304, calibrated October 26, 1982 and proceeded to make several measurements of interest. As a result of this survey and observation of the licensee's survey technique the following comments are noted:

- The ratio of 9"/3" sphere measurements indicated an average neutron energy of approximately 75 kev in areas of direct shine (Position 125) and less than 2 kev in well shielded areas (Positions 91, 109).
- NRC and licensee gamma radiation levels were in good agreement.
- Neutron dose rates on the 63' elevation were extremely position dependent.
- The PRS-2 was not appropriate for performing scanning type measurements in high dose rate areas.

These observations were discussed with licensee representatives. The licensee's survey will be reviewed in subsequent inspections.

5. Exit Interview

The inspector met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on October 28, 1982. The inspector summarized the scope and findings of the inspection.

The inspector stressed the importance NRC places on the licensee's ability to identify and correct problems in a timely manner.