



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

RECEIVED

SEP 25 1989

HAROLD B. RAY

SEP 20 1989

RECEIVED

SEP 25 1989

ENTERED

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

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

NUCLEAR LICENSING

Attention: Harold B. Ray, Vice President ✓
Nuclear Engineering, Safety and Licensing Department

Gentlemen:

SUBJECT: NRC INSPECTION OF SAN ONOFRE UNITS 1, 2, AND 3

This refers to the routine on site inspection conducted by Messrs. G. Cicotte and J. Russell of this office on August 14-18, 1989, of activities authorized by NRC License Nos. DPR-13, NPF-10, and NPF-15, and to the discussion of our findings held by Mr. Cicotte with Mr. P. Knapp and other members of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspectors.

No violations of NRC requirements were identified as a result of this inspection.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

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

Sincerely,

G. P. Yuhas
Gregory P. Yuhas, Chief
Emergency Preparedness and
Radiological Protection Branch

Enclosure:

Inspection Report Nos. 50-206/89-23, 50-361/89-23, and 50-362/89-23

SEP 20 1989

cc w/enclosure:

D. J. Fogarty, SCE

R. H. Bridenbecker, SCE (San Clemente)

H. E. Morgan, SCE (San Clemente)

State of California

10/1/89

U.S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-206/89-23, 50-361/89-23, and 50-362/89-23

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

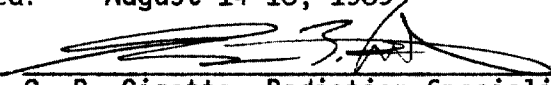
Licensee: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Facility Name: San Onofre Nuclear Generating Station

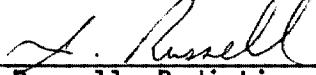
Inspection at: San Clemente, California

Inspection Conducted: August 14-18, 1989

Inspected by:


G. R. Cicotte, Radiation Specialist

9-20-89
Date Signed


J. Russell, Radiation Specialist

9-20-89
Date Signed

Approved by:


F. A. Wenslawski, Chief
Facilities Radiological Protection Section

9/20/89
Date Signed

Summary:

Inspection during the period of August 14-18, 1989 (Report Nos. 50-206/89-23, 50-361/89-23, and 50-362/89-23)

Areas Inspected: Routine unannounced inspection by a regionally based inspector of occupational exposure; radioactive waste systems; followup of open items, and tours of the facility. Inspection procedures 30703, 30702, 83750, 84750, 92701, 90712, and 90713 were addressed.

Results: In the four areas addressed, no violations were identified. In one area, an unresolved item, regarding the scope of audits of unit staff performance, training, and qualifications, was identified (paragraph 2.A). Overall, the licensee's programs appeared fully capable of meeting their safety objectives.

DETAILS

1. Persons Contacted

C. McCarthy, Vice President and Site Manager
 *D. Brevig, Onsite Nuclear Licensing (ONL) Supervisor
 *J. Fee, Assistant Operational Health Physics (HP) Manager
 E. Goldin, HP Engineering Supervisor
 *D. Herbst, Site Quality Assurance (QA) Manager
 *S. Jones, QA Engineer
 *P. Knapp, HP Manager
 R. Plappert, Compliance Supervisor
 *J. Pope, Dosimetry Supervisor
 R. Reiss, QA Supervisor
 *W. Strom, Independent Safety Evaluation Group (ISEG) Supervisor
 R. Waldo, Assistant Technical Manager
 *R. Warnock, Assistant HP Manager

*Denotes those personnel present at the exit interview held on August 18, 1989. In addition, the inspectors met and held discussions with other members of the licensee's staff.

2. Occupational Exposure (83750)

A. Audits

The licensee's audit schedule was reviewed to determine compliance with the program review and audit requirements of Technical Specification (TS) 6.5.3, Nuclear Safety Group (NSG). The schedule included all Health Physics related areas, with the exception of an audit of the unit staff. TS 6.5.3.5 states, in part:

"Audits of unit activities shall be performed under the cognizance of the NSG. These audits shall encompass:

"....b. The performance, training and qualifications of the entire unit staff at least once per 12 months..."

A copy of the 1989 preliminary audit plan was provided to the inspector. The inspector noted that the scheduled audit did not include HP or Chemistry personnel. Discussion with personnel of the on site QA group, and with the NSG Manager, revealed that training and qualifications of HP and Chemistry were to be audited separately, in order to give more attention to these areas, in which the auditors had discerned that improvement had peaked and some personnel showed a decrease in commitment to excellence. The licensee stated that the audit of HP and Chemistry had been postponed in order to conform to the outage schedule. The inspector asked if performance had been audited as part of the 1988 audit. The licensee stated that while the on-site QA group normally performs review of activities under the cognizance of the NSG, the NSG had retained direct responsibility for review of unit staff performance.

Copies of past NSG reviews of staff performance were provided to the inspector. These reviews were in the form of internal memoranda from the NSG Manager, typically titled "NSG Audit of Technical Specification 6.5.3.5b Performance of Unit Staff." The inspector noted that performance of the staff in some program areas, particularly in the areas of HP and Chemistry were not addressed. For example, the audit for 1988 stated that the purpose of the audit had been accomplished by review of a surveillance, #0-1-88, which was an examination of procedure changes, and by participation in a maintenance audit, #SCES-013-88. No HP or Chemistry procedures appeared to have been reviewed as part of surveillance #0-1-88. Although SCES-013-88 stated that HP activities were "of considerable interest," no aspects of HP or Chemistry performance were addressed in the audit itself, and no HP or Chemistry personnel were listed as having been contacted. The audit for 1987 contained reference to a shutdown cooling system valve packing failure in Unit 2, a pressure transmitter failure in Unit 1, an equipment/facility evaluation in Unit 1, and an evaluation of control room habitability. The NSG Manager acknowledged that these incident investigations and equipment evaluations did not appear to have adequately monitored HP performance.

The licensee's audit of training and qualifications for 1988, which the licensee stated was conducted to meet TS 6.5.3.5.b, was reviewed. The inspector noted that the only aspect of HP or Chemistry training and qualifications which was reviewed was the licensee's requirements for training and qualification as compared to the INPO recommended requirements. No actual records of training or personnel qualifications were reviewed as part of the audit.

When the inspector expressed concern, with respect to the scope of the audits of performance, training, and qualifications, the licensee stated that the transfer of responsibility for audits of unit staff to the on site QA organization, was expected to improve the scope and depth of the audit process. Discussion of this additional responsibility with the on site QA staff resulted in the conclusion that in the future, performance could be adequately audited in that manner. However, with respect to the scope of the audit of training and qualifications, the licensee later stated that their audit schedule was designed to accomplish review of approximately one third of the program area each year, such that all areas would be addressed within three years. The inspector reminded the licensee that with respect to TS 6.5.3.5.b, the requirement is for a one year cycle of review. The licensee acknowledged the inspector's observations at the exit interview. However, they stated that they believed the current three year cycle was adequate. Pending further review of licensee audits, the scope of audits by the NSG is considered an unresolved item, and will be examined in a subsequent inspection (50-206/89-23-01 (Unresolved)).

An unresolved item is a matter about which more information is required in order to determine if it is an acceptable item, a deviation, or a violation.

B. Changes

No major changes in equipment or procedures had taken place since the last inspection of this program area. However, the licensee was in the process of installing a new stand-up whole body counter and the vendor representative was observed while providing training to supervisory HP personnel.

C. Planning and Preparation

Planning for the outage was discussed with licensee HP personnel. The licensee appeared to have adequate staffing and outage management structure to accomplish planned tasks. No concerns were identified.

D. Internal Exposure Control

Representative records of personnel internal exposures were reviewed, including NRC Form 5 equivalents, dose assessments, bioassay records, medical evaluations for respirator use, and equipment maintenance records for whole body counts (WBC). WBC activities were observed and practices were discussed with personnel who operate the equipment.

The licensee's program for control of exposure to airborne radioactivity was reviewed, and respiratory protective equipment use and maintenance procedures were discussed with HP and other plant personnel. The licensee stated that no personnel had been exposed to more than 40 MPC-hours in 1989. The licensee further stated that they were not currently employing any occupationally exposed minors. The licensee's programs incorporate the provisions of Regulatory Guides 8.8, "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be as Low as is Reasonably Achievable," 8.15, "Acceptable Programs for Respiratory Protection," and NUREG 0041, "Manual of Respiratory Protection Against Airborne Radioactive Materials."

The licensee does not use the minimum criteria specified in 10 CFR 103(a)(3), that is, that assessments be conducted for any calculated exposures in excess of 2 MPC-hours per day or 10 MPC-hours per week. However, all expected exposures are tracked, including those less than the above noted values, in the licensee's computerized records program, such that special assessments of program effectiveness will be conducted for exposures which approach the administrative limit of 30 MPC-hours.

With respect to use of procedures, the inspector noted that for the laydown WBC instrument, the "Calibration and Background Log," form SO(123) 164, Revision 1, dated October 15, 1984, the acceptable range listed for channel checks did not match the procedure, SO123-VII-4.2.1, "Operation of the Analytical Whole Body Counting System," Revision 8, dated October 11, 1988. Some of the logsheets had the range crossed out and the applicable range from the procedure written in. Additionally, there were numerous writeovers and scratched out entries in the log. Personnel with whom procedure use

was discussed were not aware of the stipulation that the procedure user is responsible for assuring that the procedure is the most recent revision. The matter was discussed with the licensee, who stated that the technician responsible for the poorly maintained logs was counseled as to licensee policy regarding corrections in logs. No other recordkeeping concerns were identified. The inspector noted that the licensee controls forms, such as SO(123) 164, independently of their respective procedures. The inspector reminded the licensee that while this practice presents economic advantages at the time of revisions, the review process should address changing those forms which incorporate data from the procedure which is altered as part of the revision. The licensee acknowledged the inspector's observations and stated that correction of the mismatch would be accomplished.

Overall, the licensee's program appeared fully capable of meeting its safety objectives. No violations or deviations were identified.

3. Radioactive Waste Systems (84750)

A. Changes

No major changes to the licensee's program had been made since the last inspection of this program area.

B. Implementation

1. Solid Waste

Solid waste processing and storage facilities were toured. All areas appeared to be adequately controlled and marked.

2. Effluents

Radioactive gaseous and liquid effluent release records were briefly reviewed. No concerns were identified.

See paragraph 5, below, for review of the Semiannual Radioactive Effluent Release Report (SARERR).

Overall, the licensee's program appeared fully capable of meeting its safety objectives. No violations or deviations were identified.

4. Followup (92701 and 90712)

50-206/89-15-01(Closed): This item refers to a licensee identified release of radioactive material outside the licensee's restricted area, which resulted in contamination of a worker at the licensee's "Mesa" facility (see Inspection Report 50-206/89-15). The inspector reviewed the licensee's investigation of the incident and conservative estimate of dose to the skin of the worker. The licensee had initiated surveys of all materials removed from the protected area, and other administrative controls on material stored off the site. No NRC limits for radiation exposure or radioactive material release quantities were exceeded in this

instance. No additional concerns were identified. This matter is considered closed.

50-206/IN-88-10, 50-361/IN-88-10, and 50-362/IN-88-10: This item refers to NRC Information Notice IN-88-101, "Shipments of Contaminated Equipment Between Nuclear Power Plants." The licensee had assigned responsibility for follow-up of actions necessary to prevent problems as described in IN-88-101. Licensee personnel who were responsible for contaminated equipment shipments were familiar with the matter. This matter is considered closed.

50-206/IN-89-44, 50-361/IN-89-44, and 50-362/IN-89-44: This item refers to NRC Information Notice IN-89-44, "Hydrogen Storage in the Vicinity of the Control Room." The configuration of the licensee's facility did not contain the hazards as described in IN-89-44. This matter is considered closed.

No violations or deviations were identified.

5. Semi-annual Radioactive Effluent Release Report (SARERR) (90713)

The licensee's SARERR for the period of January to June, 1989, dated August 30, 1989, was reviewed. Revision 5 to the Unit 1 Offsite Dose Calculation Manual (ODCM) was included. The SARERR stated that for Units 2 and 3, ODCM Revision 20 was included in the Monthly Operating Report for April, 1989. Both revisions were reviewed. The changes for both ODCMs were primarily in response to new information from the 1988 Land Use Census. The dose via the fish ingestion pathway for iodine and the maximum air dose for the limiting sector from krypton, for all units, were reviewed. No concerns were identified.

Overall, the licensee's program appeared fully capable of meeting its safety objectives. No violations or deviations were identified.

6. Tours of the Facility

Tours of the Auxiliary, Radioactive Waste and Turbine Buildings, for all three units, were conducted. Independent radiation surveys were performed with NRC ion chamber survey instrument model #RO-2, serial #015844, due for calibration on September 26, 1989.

Personnel who were observed performing work in controlled areas were dressed in protective clothing and wore dosimetry in accordance with their respective Radiation Exposure Permits (REP). Personnel with whom REP controls were discussed were familiar with the requirements of their REP. Housekeeping had been maintained satisfactorily, as in the last inspection. In one instance, in conflict with licensee policy, a handwritten sign had been used to warn of an oxygen deficient atmosphere in a gaseous waste processing cubicle. The hazard was verified to have been eliminated when brought to the licensee's attention.

Overall, the licensee's program appeared fully capable of meeting its safety objectives. No violations or deviations were identified.

7. Exit Interview

The inspector met with those individuals, denoted in paragraph 1, at the conclusion of the inspection on August 18, 1989. The scope and findings of the inspection were summarized. The unresolved item, discussed in paragraph 2.A, above, was reviewed with the licensee at which time they stated their position regarding the three year review cycle.