U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-206/79-15

Docket No. 50-206 License No. DPR-13 Safeguards Group

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

Facility Name: San Onofre Unit 1

Inspection at: Camp Pendleton, California

Inspection conducted: October 15-19, October 30-November 2, 1979

Inspectors: J. R. Curtis 12/10/79
J. R. Curtis, Radiation Specialist Date Signed

Date Signed

Date Signed

Approved By: for E. A. Wenslawski 12/10/79
H. E. Book, Chief, Fuel Facility and Materials Safety Branch Date Signed

Summary:

Inspection on October 15-19, and October 30-November 2, 1979 (telecon on 11/6/79) (Report No. 50-206/79-15)
Areas Inspected: Routine, unannounced inspection of the radioactive waste handling program, including review of release records, methods and procedures for treatment of solid, liquid and gaseous radioactive waste, examination of effluent monitoring systems and sampling methods, and collection of confirmatory measurement samples. The inspector investigated the licensee action to date in response to IE Bulletin 79-19 and two licensee event reports (LER 79-11 and 12) related to environmental monitoring. The status of emergency response planning was discussed and an emergency drill was observed. The inspection involved a total of 52.5 hours onsite by one inspector.

Results No items of noncompliance or deviations were identified.

RV Form 219(2)

DETAILS

1. Persons Contacted

*J. Curran, Plant Manager
*R. Brunet, SONGS-1 Superintendent
*M. Sullivan, Supervisor, Chemical and Radiation Protection, Unit 1
R. Santasuosso, Supervisor, Plant Instrumentation, Unit 1
*G. Peckham, Chemical and Radiation Protection Engineer, Unit 1
*M. Wharton, Nuclear Engineer
D. Pilmer, SCE Emergency Response Team I Member
*G. MacDonald, SCE Quality Assurance
*R. Sergott, Instrumentation Foreman, Unit 1
*E. Bennet, Chemical and Radiation Protection Engineer, Unit 1

The inspector also interviewed other members of the SCE staff during this inspection.

*Denotes those present during the exit interviews.

2. Radioactive Waste Systems

a. Operations - General

The inspector discussed the methods and procedures for the collection, storage, treatment, sampling, monitoring and release of radioactive waste at the plant with Operations and Chemical and Radiation Protection personnel. Separate "walk through" tours of the Auxiliary Building were made for examination of the equipment used in the liquid, gaseous and solid waste treatment systems. Recent licensee efforts to reduce the activity in the liquid effluent by adding a new filtration step in the effluent treatment process were discussed.

b. Liquid and Gaseous Releases - Records, Reports and Procedures

Examination of records and discussions with licensee representatives established that limits on liquid and gaseous waste release rates, concentrations and total quantities were within technical specification limits. Records verified that minimum dispersal and dilution equipment was operating during releases, and monitoring equipment was operable. In addition, individual and composite samples are collected and analyzed during treatment and discharge of liquid and gaseous batch releases. Liquid samples are analyzed by the licensee for gamma spectrum, tritium and gross alpha and beta activity and composite samples are sent to a contractor for gamma spectrum, tritium, gross beta and strontium activity. Gaseous waste tank samples and CV1 cryogenic processor release samples are gamma-spectra analyzed for noble gases and iodines. Containment purge releases are analyzed for noble gases, iodines, tritium and particulates.

During the inspection, samples of the following records were examined:

(1) Liquid Radioactive Waste Release Permits
Nos. 879 through 969 included 65 release permits in eleven months of 1978 and 35 in the first six months of 1979.

(2) Gaseous Radioactive Waste Release Permits
Nos. 2347 to 2500 included 153 release permits in the first six months of 1979.

(3) Semiannual Operating Reports
Nos. 23 and 24, for the period July 1, 1978 to June 30, 1979.

(4) Solid Waste Shipment Records and Surveys

(5) Technical Specification Compliance Monthly Tallies

(6) Station Orders, Radiation Protection, Engineering and Instrumentation Procedures
Orders and procedures related to radioactive waste handling, monitoring, sampling, and release.

c. Effluent Control Instrumentation

Gaseous and liquid effluent instrumentation was examined and discussed. Records and techniques for instrument checks and calibrations were examined and discussed with licensee representatives at the operational, supervisory and management level. Calibration of Operational Radiation Monitoring Stations (ORMS), which includes effluent monitoring instrumentation, is done semiannually, and daily and weekly functional checks are made by operations personnel as part of their checklists. Records of the calibration tests performed in September and April 1979 and September 1978 were examined and the test methods were discussed. The tests were performed as required by the technical specifications. There were some discrepancies in the recording of calibration results on some channels. Rigorous calibration with NBS traceable sources and cross-checking of the monitoring instrument response with activity of effluent samples when measured in the laboratory had been done in the past but was not being performed on a regular schedule. This was discussed with supervisory and management personnel at the exit interview and licensee representatives indicated that the status of monitoring instrumentation and its calibration had been identified as an item for review and will be reviewed for improvement.

d. Reactor Coolant Quality Testing

Records of routine tests of reactor coolant to assure compliance with technical specifications were examined. Record

checks verified that the tests were performed at the specified frequency and activity levels were significantly lower than the technical specification limitation.

e. Solid Waste

Procedures and techniques for collecting, handling, storage and disposal of spent resins and other solid wastes were examined and discussed. Facilities and equipment for collecting, compacting, labeling and storing low-level solid waste and spent resins were examined. No solid waste handling operations were observed. The storage areas for solid waste were adequately posted and controlled. Packages stored awaiting transfer to the SCE contractor for transport to the disposal site appeared adequately secured and labeled. Two drums of compacted waste were distended at top and bottom by the compaction process, the rims used to secure the drum cover was bolted and closure appeared positive and secure. The "housekeeping" condition of the room used for baling and other solid waste handling equipment was poor. This was called to the attention of licensee management prior to the exit interview. Management action to cleanup the area was initiated at that time.

The solid waste handling procedures and training associated with this activity is presently undergoing separate review by a specifically assigned SCE engineer in connection with response to IE Bulletin 79-19. (See Paragraph 3 for details)

No items of noncompliance or deviations were identified.

3. Status of Licensee Response to IE Bulletin 79-19

The licensee reported in writing, their plan of action and proposed schedule of action for items mentioned in the Bulletin on September 19, 1979. The inspector met with licensee representatives with assigned responsibilities in this area to review the status of response. The status of the response items enumerated Nos. 1 through 9 in IE Bulletin 79-19 follows:

a. RESPONSE ITEM #1

A current set of Department of Transportation (DOT) Regulatory requirements, 49 CFR Parts 170-179 and NRC Regulatory Requirements, 10 CFR Parts 19 to 71 and 150, are maintained by the Chemical and Radiation Protection engineer.

RESPONSE ITEM #2

A current set of requirements imposed upon Nuclear Engineering Company by the Agreement State of Nevada for the Beatty Facility and the Agreement State of Washington for the Richland Facility are maintained by the Chemical and Radiation Protection engineer.

RESPONSE ITEM #3

Station Order S-E-205, Receipt and Shipment of Radioactive Material, is being revised to designate the Station personnel who are responsible for the safe transfer, packaging and transport of low-level radioactive material. Responsibility for the revision of S-E-205 by October 31, 1979 had been assigned and was in progress at the time of the inspection.

RESPONSE ITEM #4

Radiation Protection Procedure S-VII-1.20, Solid Radioactive Waste Shipments is being reviewed to provide more detailed instructions related to the transfer, packaging and transport of low-level solid radioactive waste. Special attention is being given to insure proper controls on the chemical and physical form of the low-level radioactive material and on the containment integrity of the packaging. Responsibility for the revision of S-VII-1.20 by October 31, 1979 has been assigned and was in progress at the time of the inspection.

RESPONSE ITEM #5

Station Order S-A-126, Personnel Training, is being revised to include a new formal training program for personnel involved in the transfer, packaging and transport of radioactive material. The training program will include the the following items:

(1) DOT and NRC Regulatory Requirements
(2) Waste and Burial Licensee Requirements
(3) Station procedures regarding radioactive materials shipments

Station Order S-A-126 will also address maintaining records, documenting attendance, training dates and subject material used. In addition, S-A-126 will specify the periodic retraining requirements for this program.

The Chemical and Radiation Protection engineer has been assigned the responsibility for implementation of the training program by December 31, 1979. The engineer responsible for revision of S-A-126 by December 31, 1979 has been assigned and the revision was in progress at the time of the inspection.

RESPONSE ITEM #6

Station Order S-A-126 is being revised to expand the scope of the Radiation Protection Training Program to insure that all Station personnel who operate the processes which generate waste are trained in safe and efficient work practices which will emphasize the importance of minimizing the volume of low-level radioactive waste generated.

The inspector discussed waste handling techniques with operating personnel and verified that they had been previously cautioned to take action to eliminate the possibility of any free standing water in solid waste and this had been stressed again recently.

RESPONSE ITEM #7

The management controlled audit function exists at SCE and has been expanded to include coverage of all transfer packaging and preparation for transport activities. The audit process is intended to provide assurance that personnel, instructions, procedures and process equipment are functioning to ensure safety and compliance with requirements. Previous audits in this area were conducted in 1978 and 1979 (SO1-62-79).

RESPONSE ITEM #8

An audit of activities related to Bulletin 79-19 items Nos. 1 through 6 was conducted in the first week of October (SO1-73-79 dated October 5, 1979). The "in progress" status was noted and no deficiencies were identified by the SCE audit. A followup audit on completion of "in progress" items and the balance of items was to be scheduled later.

RESPONSE ITEM #9

The licensee responded by letter, dated September 19, 1979 (J. Head to R. H. Engelken), within 45 days of the August 10, 1979 Bulletin, as requested.

No items of noncompliance or deviations were identified.

4. Followup on Licensee Event Reports (LER) 79-11, 79-12

The inspector investigated the licensee's corrective actions to prevent recurrence of two licensee reportable items.

a. LER 79-11 describes an occurrence wherein a monthly drinking water sample from the Three Cities Municipal Water District (TCMWD) for May 1979 was lost in transit and a supplemental or backup sample was not collected. (Knowledge that the sample was missing was not known until after the end of the month.) This sample represents one of three monthly samples taken and sent to LFE for analysis under the monitoring program specified in the SCE technical specifications. The licensee reported the loss and reviewed the circumstances under which it occurred. Corrective actions prescribed by the licensee to eliminate recurrence are to revise appropriate procedures to specify that SONGS station personnel collect and forward samples to LFE as opposed to SCE personnel at another station. Personnel involved in the sampling program were apprised of the changes.

b. LER 79-12 describes an occurrence in which a heat treatment of the water intake tunnel was performed and fish impingement data was lost for that treatment. The loss occurred when operations personnel failed to notify and confirm the onsite presence of personnel who collect the fish impingement data by examination of specimens in the fish basket or strainer. Corrective actions initiated by the licensee to prevent recurrence include revision of appropriate procedures and preparation of a new procedure to establish the requirement to notify and verify the presence of the data collection personnel onsite before heat treatments are initiated. Personnel involved in the scheduling and performance of heat treatment operations and those who collect the fish impingment data were made aware of these actions and procedures. A heat treatment using the new procedures was performed on September 29-30, 1979, and data was successfully collected.

No items of noncompliance or deviations were identified.

5. Radioactive Waste - QC and Confirmatory Measurements

The inspector discussed the sampling and analysis processes for released gaseous and solid effluents, examined the composite sampling devices and instrumentation used for analysis. Split samples from a waste gas decay tank and a recirculating liquid waste tank were collected and submitted to an NRC contractor laboratory for analysis. Results of analyses of these samples will be compared with the licensee's results when both sets of analyses data are made available.

Charcoal cartridge and particulate samples, prepared and analyzed at the NRC contractor laboratory, were submitted to the licensee for analysis. Results of these analyses will also be compared as part of the confirmatory measurement program.

No items of noncompliance or deviations were identified.

6. Emergency Planning - Tests and Drills

The inspector witnessed the licensee's annual coordinating drill as described in their Emergency Plan, Section 8.1.2. The inspector observed the licensee's early response activity at the Control Room, the Onsite Coordination Center, adjacent to the Control Room, and later observed response by the Corporate Response Team I at the Offsite Control Center in San Clemente. A critique of the station response activity during the drill was held shortly after the drill was over and the inspector attended this critique. The results of the exercise and self-evaluation of licensee's action was covered in the critique and appropriate corrective action was initiated to correct identified deficiencies.

No items of noncompliance or deviations were identified.

7. Exit Interviews

Exit interviews were held with licensee management on October 19, and November 2, 1979. At each exit interview, the status and findings of the portion of the inspection completed to date were reviewed, and the items of concern and licensee corrective actions as described in Paragraphs 2.c and 2.e were reviewed. The licensee was advised that no items of noncompliance or deviations were identified.