### **ENCLOSURE**

# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION IV**

Docket No:

50-206

License No: DPR-13

Report No:

50-206/98-06

Licensee:

Southern California Edison Co. P.O. Box 128 San Clemente, California

Facility:

San Onofre Nuclear Generating Station, Unit 1

Location:

San Clemente, California

Dates:

June 29 - July 2, 1998

Inspectors: Louis C. Carson II, Health Physicist Louis L. Wheeler, Project Manager

Accomapanied by: D. Blair Spitzberg, Ph.D., Chief Nuclear Materials Safety Branch 2

Approved: D. Blair Spitzberg, Ph.D., Chief Nuclear Materials Safety Branch 2

Attachment:

Supplemental Information



# **EXECUTIVE SUMMARY**

# San Onofre Nuclear Generating Station (SONGS) NRC Inspection Report 50-206/98-06

This routine, announced inspection of Unit 1 included review of the licensee's safety evaluations, plant operations, fire safety program, management organization, fuel storage and spent fuel pool (SFP), radiation protection program, material condition, and radiological effluent/environmental monitoring.

#### Plant Status

 The SONGS Unit 1 facility remained in SAFESTOR as required by its Post Shutdown Decommissioning Activities Report (PSDAR) and Permanently Defueled Technical Specifications (PDTSs). The licensee had organized decommissioning project staff to plan for the Unit 1 decommissioning and dry cask storage of Unit 1 spent fuel (Section 1).

#### **Operations Verification**

- Facility material condition, housekeeping, and cleanliness were excellent. A detailed tour within containment and the SFP areas verified that structures, systems, and components continue to contribute to the safe storage of spent fuel (Section 2.0).
- The licensee had implemented a fire protection and prevention program that met license requirements. No abnormal fire loading conditions were identified (Section 2.0).
- A high quality control room pre-job brief for the annual containment inspection contributed to the safe and successful accomplishment of this activity (Section 2.0).

#### **Occupational Radiation Exposure**

- The licensee's organization and lines of responsibility complied with its PSDAR and PDTSs. The organization and staffing were appropriate for Unit 1's shutdown and defueled condition (Section 3.0).
- The radiation protection program met requirements and was appropriate for Unit 1's shutdown and defueled condition. Radioactive materials, radiation work activities, and radiation areas were being controlled in accordance with the applicable requirements (Section 3.0).

#### SFP Monitoring

• The Unit 1 SFP was in compliance with technical specifications for water level, temperature, and chemistry. The water clarity and condition of the SFP structures were observed during a walkdown of the facility. No problems or concerns were identified (Section 4.0).

# Unit 1 10 CFR 50.59 Safety Evaluations

• The licensee had adequately documented changes to the facility as required by 10 CFR 50.59. The licensee had addressed the decommissioning activity limitation requirements of 10 CFR 50.82(a)(6) through a plant configuration control procedure (Section 5.0).

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### Radwaste Treatment, Effluent, and Environmental Monitoring

• The licensee's Annual Effluent Release Report, Radiological Environmental Monitoring Program, and effluent monitoring programs met the requirements of the PDTS and Offsite Dose Calculational Manual. Unit 1's effluent releases and direct radiation resulted in doses to the public that were fractions of the 10 CFR Part 20 annual limit of 100 millirems (Section 6.0).

#### **Report Details**

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#### Plant Status,

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SONGS is a three unit site of which Unit 1 had been permanently shutdown. Unit 1 began commercial operation on January 1, 1968, and was permanently shutdown on November 30, 1992. Since that date, the licensee had defueled the reactor, stored the spent fuel in the site's SFPs, and placed the unit in SAFSTOR. Unit 1's license was amended for possession-only status in March 1993. The licensee submitted a proposed decommissioning plan for NRC approval in November 1994. Under the provisions of decommissioning regulations issued in August 1988, the decommissioning plan became the PSDAR.

At the time of this inspection, the licensee planned to submit an updated PSDAR by December 15, 1998. Since the last inspection, the licensee had formed the SONGS 1 Decommissioning Project organization to plan the SONGS Unit 1 decommissioning, radioactive waste storage, and dry fuel storage programs. Discussions held with licensee management revealed the following:

- The licensee received permission from the California Public Utilities Commission to use up to 3 percent of Unit 1's \$460 million decommissioning fund for planning.
- The licensee was evaluating the potential cost benefit of performing partial Unit 1 dismantlement activities.
- SONGS Unit 1 decommissioning planning included the consideration of an onsite independent spent fuel storage installation (ISFSI). Currently, 188 Unit 1 spent fuel assemblies are stored in Units 2 and 3 SFPs. There was insufficient spent fuel storage capacity at SONGS to support Units 2 and 3 operations beyond Year 2006.

# 2 Operational Safety Verification (71707) and Fire Protection/Prevention Program (64704)

#### 2.1 <u>Scope</u>

The inspectors toured the facility to assess the status of structures, systems, and components in SAFSTOR. This effort involved tours of the radiation control area, containment, control room, and the SFP building. Inspections included an assessment of housekeeping, fire hazards, radiation material control, access, and lighting. The scope of this inspection effort included observing the Unit 1 containment entry tailboard and pre-job briefing meeting.

# 2.2 Observations and Findings

#### a. <u>Containment Entry Discussion</u>

The licensee opens and inspects the Unit 1 containment at least annually to assess the material status of containment structures, systems, and components maintained in a SAFSTOR configuration. Inspectors observed the licensee's pre-job brief (i.e., tailboard) for containment entry to ascertain whether important personnel and equipment safety considerations were discussed with the plant staff prior to containment entry. Inspectors observed health physics technicians and plant personnel conduct radiation protection practices. Most systems inside containment are not active and not necessary for the safe storage of spent fuel. However, an inspection of containment is important to verify that conditions have not degraded to a point representing an unsafe radiological or facility situation. Systems that penetrate containment, such as fire water and component cooling water (CCW) were permanently isolated with closed valves or blind flanges. Some containment systems, such as the reactor vessel and system low points contained water; however, no pressurized water existed. With the exception of telephone communication supply power, the licensee shuts off electrical power to containment when the containment is closed.

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#### b. <u>Pre-Job Brief for Containment Entry</u>

For the containment activities, the lead person responsible for the safe accomplishment of the activity provided a summary of the activity to be performed. These briefs were generally technical and added value to the tailboard. All personnel became familiar with other activities in case assistance was needed. Inspectors observed that all personnel performing and supporting the containment entry were in attendance at the tailboard. The licensee conducted the containment entry tailboard to assure that all personnel were briefed on procedural requirements, personnel safety considerations, and the scope of activities to be performed. The purpose of the containment entry was to perform a containment inspection, test the containment sump level alarm, and perform a fire system alignment check. The control room shift supervisor (SS), the senior operator on shift, conducted the brief using Procedure S023-0-44, "Professional Operator Development Program," which provided guidance on the conduct of tailboards. The SS followed Procedure SO1-4-44, "Containment Access System Operation," focusing on precautions, prerequisites, and the procedure steps that would be conducted. A detailed review was conducted to assure all personnel understood entry and egress requirements, command and control responsibilities, and communications. The SS assured proper containment ventilation, purge duration, temperature, humidity prior to entry, and stressed the importance of both personnel and plant safety. Plant management observed the brief, questioned key personnel in their duties, and provided insight to the safe accomplishment of this activity.

#### Containment and Facility Tour

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Inspectors toured accessible areas within containment except for the reactor annulus space due to radiation protection considerations. In areas inspected, unfettered access

was afforded to all components and systems. Permanent lighting within containment was sufficient to support a thorough inspection of the areas toured. Transient materials such as scaffolding, tools, and waste containers were appropriately stored and segregated representing good material control. Floors, horizontal surfaces, and corners within containment were free of excessive dirt or waste. No excessive corrosion was identified on any systems, indicating that the surfaces had not been wet. Containment sump motors were in good material condition, and sumps were dry and free of trash that could potentially clog the sump pumps during operation.

The inspectors and licensee representatives performed detailed inspections to identify water leakage from systems or free standing water, both of which would indicate a problem. Floors, systems, and components were observed to be dry; no standing water was observed. Also, there was no indication of residue from evaporated water. Observation of the fuel transfer blind flange and the horizontal surfaces adjacent to and surrounding the reactor head flange verified that surfaces were dry. Standing water in these areas or leakage from the transfer tube blind flange could possibly indicate a degradation in the SFP boundary integrity. The licensee conducted its inspection in accordance with Procedure SO1-4-25, "Ventilation System Operation," which provided a checklist to assure that important considerations were inspected and assessed.

Inspectors observed that the containment contained low combustible loading. This included checking for fire loading such as electrical cabling, oil on components and equipment, use of fire-resistant scaffolding, and miscellaneous pump and motor-operated valve oils. Combustibles observed in containment included plastic bags used for controlling radioactive contamination, tygon hoses, and articles used for housekeeping. Inspectors determined that materials in containment did not represent an adverse fire loading.

The inspectors toured the auxiliary facility with personnel who routinely performed equipment checks of the auxiliary building, SFP cooling and CCW systems. Inspectors observed good material conditions, unfettered access, and good housekeeping. The inspectors determined that the CCW system, which cools the SFP cooling water via a heat exchanger, appeared to be in good operational condition.

# 2.3 <u>Conclusions</u>

Facility material condition, housekeeping and cleanliness were excellent. A detailed tour of containment revealed that structures, systems, and components continue to contribute to the safe storage of spent fuel and demonstrate appropriate material integrity. The licensee had implemented a fire protection and prevention program that met license requirements.

The inspectors concluded that the tailboard contributed to the safe accomplishment of the containment entry. Activities within containment were well orchestrated and conducted safely illustrating the effectiveness of the preplanning. Appropriate management oversight was provided.

# **3** Occupational Radiation Exposure During (83750)

# 3.1 Inspection Scope

Inspectors reviewed the licensee's organization and the requirements in Section D6.2 of the PDTS which define lines of authorities and responsibilities. The PDTS, Table D6.2-1, "Minimum Shift Crew Composition," lists the minimum shift composition required to ensure that personnel are available in case of an emergency. The inspectors reviewed licensee activities to determine the adequacy of the radiation protection program for Unit 1's defueled operations and to determine whether the licensee was in compliance with the requirements of PDTS D6.11. This included a review of the radiation protection procedures, survey records, and as low as is reasonably achievable (ALARA) reviews. The inspectors also reviewed the adequacy of the licensee's radiation protection program pertaining to inspecting the Unit 1 containment.

#### 3.2 Observations and Findings

#### a. <u>Organization</u>

Over 100 individuals supported Unit 1's SAFESTOR operations during 1997 and 1998. At least 25 individuals were directly assigned to Unit 1. The following departments are involved in Unit 1: decommissioning, dry fuel storage, operations, maintenance, emergency preparedness, station technical, chemistry, health physics, security, training, site support, nuclear engineering and construction, nuclear oversight, nuclear regulatory affairs, and nuclear project management. Most workers assigned to Unit 1 also had responsibilities for Units 2 and 3 operations.

A review of selected procedures indicated that the licensee had established an organization and defined responsibilities that were consistent with the PSDAR and PDTS. Interviews with selected managers indicated that the procedures were being implemented in a manner that ensured the safety of the Unit 1 spent fuel. Interviews with licensee representatives indicated that SONGS maintained much of its Unit 1 experienced staff due to cross-training programs with Units 2 and 3 workers.

The inspectors observed the number of on-site crew members present and the conduct of operations. Inspectors observed that at least one individual qualified to stand watch in the control room was in the control room area, in accordance with PDTS. The actual number of personnel that were on duty during the inspection met or exceeded the minimum total established in the PDTS.

#### b. Radiation Protection and ALARA

Inspectors reviewed ALARA planning and radiation exposure permit (REP) development for work activities conducted in late 1997 and in 1998. Inspectors noted that the Unit 1 collective personnel dose for 1997 was 1.38 person-rem as compared to

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2.98 person-rem in 1996. The collective dose through June 1998 was 0.48 person-rem as compared to 0.69 person-rem during this period in 1997. It should be noted that the SONGS site ALARA goal for 1997 was 350 person-rem. The site ALARA goal for 1998 is 250 person-rem. Inspectors reviewed REPs that were issued for Unit 1 containment entries and maintenance activities in 1997 and 1998. The Unit 1 activities with the most significant potential for personnel dose included the following jobs: (1) SFP lighting project, (2) radioactive monitor tank sludge removal project, and (3) SFP area painting. Inspectors reviewed Unit 1 survey log records, area plot plans, and survey pre-job planning cards. Detailed periodic radiation and contamination surveys had been performed in accordance with the licensee's radiation survey procedures.

The tailboard meeting discussed in Section 2 of this report covered radiation safety. Key radiological considerations were provided by the lead health physics technician, such as known hot spots and expected loose surface contamination and general area radiation levels. The REP was reviewed in detail, and a good overall radiological perspective was provided which included ALARA considerations. The radiation exposure dose estimates were predetermined based on previous containment radiation surveys and provided at the tailboard for the participants to be used as reference values while performing their duties. Health physics technicians provided direct oversight of the activities within containment.

During the Unit 1 facility tour of the containment and SFP facilities, radiation exposure levels measured by inspectors were in agreement with the licensee's survey records and postings. Inspectors determined that detailed work planning, and radiation protection pre-job briefings were adequate for the tasks being performed. REP and ALARA evaluations had been conducted adequately by radiation protection staff.

#### 3.3 <u>Conclusions</u>

The licensee's organization and lines of responsibility complied with its PDTS and PSDAR. The organization and staffing were appropriate for Unit 1's shut down and defueled condition.

The radiation protection program met requirements and were appropriate for Unit 1's shutdown and defueled condition. Radioactive materials, radiation work activities, and radiation areas were being controlled in accordance with the requirements of 10 CFR Part 20, PDTS D6.8.1, PDTS D6.8.4, PDTS D6.11, and PDTS D6.12.

#### 4 SFP Monitoring (86700)

#### 4.1 Inspection Scope

The inspectors conducted a walkdown of the SFP and performed a review of numerous daily logs and records to verify compliance with the technical specifications.

The Unit 1 SFP had 216 available slots for spent fuel. Of these, 207 contained spent fuel assemblies and four contained trash containers. Licensing requirements for the SFP were specified in Sections D3.1 and D4.1 of the PDTSs and included water level, temperature, chemistry and periodic surveillences.

A walkdown of the SFP area was conducted. The water clarity was excellent. The recirculation system was observed to be functioning. The temperature of the water was confirmed at 70°F on the local temperature gage. The facility appeared orderly and properly posted. No materials were observed near the SFP where they could fall into the pool. The facility structure appeared in good condition. No obvious deterioration of the building was evident.

SONGS Unit 1 demonstrated compliance with PDTS requirements for the SFP using operating instruction S01-12.1-4, "Control Room Daily Log," Attachment 1: Surveillences. Data was collected and recorded on the daily surveillance logs by both the day shift and the night shift crew. Trending graphs were reviewed which covered the period from late 1994 through June 1998.

Technical Specification D3.1.1, "Spent FUEL Pool Temperature," required the pool water to be maintained at less than 150°F. At least one SFP cooling train was required to be functional. Technical Specification D4.1 required daily verification of the SFP water temperature. A review of surveillance data indicated temperatures were typically maintained near 70°F since July 1997 and at least one SFP cooling train was operational on a daily basis.

Technical Specification D3.1.2 required the water level of the SFP to be maintained at an elevation of not less than 40 feet 3 inches. Technical Specification D4.1 required daily verification. A review of the daily surveillance data indicated that water level was typically maintained near 40 feet 9 inches and at no time was it below 40 feet 3 inches.

Technical Specification D3.1.3 established upper limits for chlorides and fluorides in the SFP water of 0.15 parts/million (ppm). Technical Specification D4.1 required monthly chemical analysis. A review of the SONGS Unit 1 SFP cooling system data trending report indicated that for the past 12 months, the chlorides and fluorides were maintained below 0.05 ppm, with typical readings of less than 0.01 ppm. The data had been plotted based on weekly analysis data. UFSAR Section 9.1.2.2.2 states that the SFP boron concentration is maintained at a minimum of 2000 ppm at all times when fuel assemblies are present. For the past year, the licensee had tracked and maintained boron levels in the SFP at 2100 to 2150 ppm.

The status of the SFP liner was discussed with the licensee. The leakage into the SFP liner well had been relatively steady over the previous year at approximately three gallons/week. Additionally, the inspector determined that licensee had received NRC Information Notice (IN) 97-14, "Assessment of Spent Fuel Pool Cooling" and conducted an evaluation of Unit 1"s SFP inventory control. The inspectors noted that the licensee

had reviewed and appropriately acted on IN 97-14. The licensee had previously addressed similar concerns raised in NRC Bulletin 94-01, "Potential Fuel Pool Draindown Caused by Inadequate Maintenance Practices at Dresden Unit 1." The issues raised in IN 97-14 were not a concern to Unit 1's SFP operations because corrective actions that were implemented in response to NRC Bulletin 94-01 were currently in-place.

#### 4.3 <u>Conclusion</u>

The Unit 1 SFP was in compliance with technical specifications for water level, temperature, and chemistry. The water clarity and condition of the SFP structures were observed during a walkdown of the facility. No problems or concerns were identified.

# 5 10 CFR 50.59 Safety Evaluation Program (37001) and Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors (37801)

# 5.1 Inspection Scope

The inspectors reviewed the licensee's administrative procedures and other documents associated with the 10 CFR 50.59 safety review process. In addition, the inspectors reviewed several 10 CFR 50.59 safety evaluations prepared by the licensee at SONGS Unit 1 since July 1997 and selected 10 CFR 50.59 training and qualification records for Unit 1 personnel.

#### 5.2 Observations and Findings

The licensee used Southern California Edison (SCE) Form 26-548, "Engineering Design Program 10 CFR 50.59 Safety Evaluation," to document its 10 CFR 50.59 evaluations. The unresolved safety question (USQ) screening criteria posed on SCE Form 26-548 were derived from 10 CFR 50.59 and were based on the "SONGS Updated Safety Analysis Report (UFSAR)." The UFSAR was last revised on December 17, 1991. Unit 1 was permanently shutdown on November 30, 1992, and its possession-only license amendment became effective on March 9, 1993. In the decommissioning plan submittal in November 1994, the licensee indicated that the decommissioning plan would become the licensing basis upon its approval. Consequently, the licensee continued to conduct its 10 CFR 50.59 evaluations against the 1991 UFSAR in anticipation of NRC approval of its decommissioning plan.

On August 28, 1996, changes to NRC regulations became effective that removed the requirement for a decommissioning plan, and revised 10 CFR 50.71(e)(4) to require permanently shutdown power reactor facilities to revise their safety analysis reports at 24-month intervals. Although SCE had been in compliance with the previous regulations in conducting its 10 CFR 50.59 evaluations against the 1991 UFSAR, they must submit a revised UFSAR by August 28, 1998. Safety evaluations pursuant to 10 CFR 50.59 conducted subsequent to that date must be based on the revised UFSAR submittal.

SCE Form 26-548 included 12 questions, the last five of which applied only to Unit 1. The five questions were developed in response to information provided in an NRC

memorandum dated January 14, 1993, "Staff Requirements - Briefing by OGC on Regulatory Issues and Options for Decommissioning Proceedings (SEC.-92-382)." This memorandum discusses what activities may be allowed at a shutdown plant prior to approval of a decommissioning plan. Although the NRC memorandum does not require these issues to be addressed in the 10 CFR 50.59 process, the licensee had chosen to answer these "decommissioning questions" by posing questions 8 through 12 on Form 26-548.

The licensee used Engineering Design Quality Procedure SO1-XXIV-10.10, "Unit 1 Post Shutdown Configuration Control," to control configuration change activities for SONGS 1. Attachment 3 of this procedure requires that the same five questions discussed in the 10 CFR 50.59 evaluations be asked as part of any proposed plant change authorization. The NRC has issued newer guidance (in 10 CFR 50.82(a)(6)) for permanently shutdown plants to consider in conducting decommissioning activities. The three issues discussed in the regulations regard decommissioning activities that could: (1) foreclose release of the site for possible unrestricted use; (2) result in significant environmental impacts not previously reviewed; and (3) result in there no longer being reasonable assurance that adequate funds will be available for decommissioning. In a previous inspection, an inspector observed that while the five questions asked in SO1-XXIV-10.10 met the intent of the revised guidance, they did not directly address the three questions posed in the revised regulations. Based on that observation, the licensee had generated an Action Request (AR) which requested that the Nuclear Engineering Design Organization (NEDO) review SO1-XXIV-10.10 and implement a procedure change to ensure that 10 CFR 50.82(a)(6) is more directly addressed. The revised SO1-XXIV-10.10 was reviewed and found to contain decommissioning review criteria which directly addressed the items specified in 10 CFR<sup>50.82</sup>(a)(6).

The inspectors reviewed several 10 CFR 50.59 evaluations prepared by the licensee for the following activities: Field Change Notice (FCN) F13243M, F13641M, F13799E, FCN F14632E, and Design Change Notice M37560. The safety evaluations reviewed were determined to be complete, accurate, and in compliance with 10 CFR 50.59.

The inspectors reviewed the training records for four randomly selected engineering support personnel who had participated in the development of the FCNs and the DCN identified above. The records showed that all four personnel had received training on 10 CFR 50.59.

The inspectors reviewed the licensee's list of maintenance orders completed since the last inspection. These items consisted primarily of activities such as the scheduled inspecting, cleaning and testing of plant equipment, and unscheduled troubleshooting and repair activities. No items were identified which indicated that a maintenance activity had been performed that may have resulted in a plant change, test or experiment that should have first been evaluated against the 10 CFR 50.59 screening criteria for USQs.

# 5.3 <u>Conclusions</u>

The inspectors found that the licensee had adequately documented changes to the facility as required in 10 CFR 50.59. The licensee had satisfactorily completed an action request to revise Procedure SO1-XXIV-10.10, "Unit 1 Post Shutdown Configuration Control," to ensure that 10 CFR 50.82(a)(6) was specifically addressed. Engineering support staff involved in the preparation of 10 CFR 50.59 safety evaluations had received training on 10 CFR 50.59. Maintenance activities were not found to result in unauthorized plant changes, tests or experiments.

#### 6 Radwaste Treatment, Effluent and Environmental Monitoring (84750)

### 6.1 <u>Scope</u>

Inspectors reviewed the licensee's radwaste treatment, radiation effluent release, and environmental monitoring programs for compliance with the PDTS. Inspectors reviewed the licensee's compliance with the PDTS as related to the Offsite Dose Calculation Manual (ODCM), radwaste system operations, radiation effluent monitoring systems, and unplanned radiological releases. Inspectors reviewed radiation effluent monitor calibration records to determine compliance with the 18-month calibration frequency identified in ODCM Tables 4.2 and 4.4. Inspectors also reviewed the SONGS 1997 Radiological Environmental Monitoring Program (REMP), the 1997 Annual Radioactive Effluent Release Report (ARERR), and the 1996 Annual Radiological Operating Report (AREOR) to determine compliance with PDTSs D6.8.1(I), D6.8.4(b), and D6.9.1.3.

#### 6.2 Observations and Findings

The Operations Department Health Physics Division had responsibility for on-site contamination and release events. The Chemistry Division had responsibility for the monitoring of effluent release pathways to the environment and maintaining effluent radiation monitors operational.

Changes to the ODCM, the gaseous radwaste treatment system, and uncontrolled or unplanned releases at Unit 1 were reported in the 1997 ARERR in compliance with the requirements of the PDTSs. Licensee's records indicated that effluent monitors had been calibrated as required by the ODCM. Inspectors reviewed the operational status of liquid and gaseous effluent radiation monitors and the radiation effluent monitor surveillance and operability records and found them to have been maintained in compliance with the ODCM. Inspectors verified that reviews or evaluations were performed by qualified individuals and reviewed by appropriate managers. The inspectors determined from the ARERR that releases offsite from Unit 1's gaseous and liquid effluents and direct radiation resulted in doses to the public that were fractions of the 10 CFR Part 20 annual limit of 100 millirem.

There were no major changes reported in the 1997 REMP or AREOR that affected Unit 1. The ARERR and AREOR were implemented as described in the ODCM and PDTS. Environmental data analysis was appropriately explained and graphically trended



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within the 1997 AREOR. Inspectors reviewed the Land Use Census data that was included in the 1997 AREOR. Inspectors determined that the licensee had appropriately assessed the land use around the facility, which included documenting significant changes.

### 6.3 <u>Conclusions</u>

The licensee's Annual Radioactive Effluent Release Report and environmental and effluent monitoring programs met the requirements of the license and ODCM. Unit 1's effluent releases and direct radiation resulted doses to the public that were fractions of the 10 CFR Part 20 annual limit of 100 millirems

# 7 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the exit meeting on July 2, 1998. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

# SUPPLEMENTAL INFORMATION

# **ATTACHMENT**

# PARTIAL LIST OF PERSONS CONTACTED

#### **Licensee**

T. Adler, Health Physics Supervisor

M. Barbantini, Manager, Health Physics Programs

J. Custer, Unit 1 Plant Superintendent

G. Cook, Compliance Engineer

D. Dick, Chemistry/Effluent Supervisor

G. Gibson, Manager, Compliance

R. Krieger, Vice President, Nuclear Generation

P. Knapp, Manager, Unit-1 Radioactive Waste

T. Llorens, Unit 1 Licensing

J. Madigan, Manager, Health Physics

J. McGraw, Manager, 10 CFR 50.59 Program

J. Rainsberry, Manager, Plant Licensing

S. Root, Manager, Special Projects

K. Yhip, Environmental Engineer

#### **INSPECTION PROCEDURES (IP) USED**

IP 37001:	10 CFR 50.59 Safety Evaluation Program
IP 71707:	Operational Safety Verification
IP 83100:	Occupational Exposure During SAFSTOR and DECON
IP 84750:	Radwaste Treatment, Effluent and Environmental Monitoring
IP 86700:	SFP Monitoring

#### **ITEMS OPENED AND CLOSED**

Opened

None

**Opened and Closed** 

None

Closed

None

# LIST OF ACRONYMS USED

ALARA	as low as is reasonably achievable
	Annual Padialogical Operating Penart
	Annual Radiological Operating Report
ARERR	Annual Radioactive Effluent Release Report
CCW	component cooling water
DCN	Design Change Notice
FCN	Field Change Notice
IN	Information Notice
IP	Inspection Procedure
ISFSI	independent spent fuel storage installation
NEDO	Nuclear Engineering Design Organization
ODCM	Offsite Dose Calculation Manual
PDTS	Permanently Defueled Technical Specification
PPM	Parts per Million
PSDAR	Post Shutdown Decommissioning Activities Report
REMP	Radiological Environmental Monitoring Program
REP	radiation exposure permit
SCE	Southern California Edison
SED	spent fuel pool
SONGS	San Onefre Nuclear Generating Station
501105	san Onone Nuclear Generating Station
00 11000	Shint Supervisor
UFSAK	Updated Final Safety Analysis Report
USQ	unresolved safety question

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