



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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March 16, 2005

Mr. Harold B. Ray, Executive Vice President
Southern California Edison Co.
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, California 92674-0128

SUBJECT: NRC INSPECTION REPORT 050-00206/05-008

Dear Mr. Ray:

An NRC inspection was conducted on February 14-18, 2005, at your San Onofre Nuclear Generating Station, Unit 1 facility. This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspection included an examination of selected procedures and representative records, observations of activities, and interviews with personnel. The enclosed report presents the results of that inspection. The inspection determined that you were conducting decommissioning activities in compliance with regulatory and license requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, please contact the undersigned at (817) 860-8191 or Mr. Robert J. Evans, Senior Health Physicist, at (817) 860-8234.

Sincerely,

/RA/

D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle and Decommissioning Branch

Docket No.: 050-00206
License No.: DPR-13

Enclosure:
NRC Inspection Report
050-00206/05-008

Southern California Edison Co.

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No: 050-00206

License No: DPR-13

Report No: 050-00206/05-008

Licensee: Southern California Edison Co.
P.O. Box 128
San Clemente, California 92674

Facility: San Onofre Nuclear Generating Station, Unit 1

Location: San Clemente, California

Dates: February 14-18, 2005

Inspector: Robert J. Evans, P.E., C.H.P., Senior Health Physicist
Fuel Cycle & Decommissioning Branch

Approved By: D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle & Decommissioning Branch

Attachment: Supplemental Inspection Information

ADAMS Entry: IR05000206-05-008 on 02/14/2005 - 02/18/2005; Southern
California Edison Co., San Onofre Nuclear Generating Station;
Unit 1. Decommissioning Report. No Violations.

EXECUTIVE SUMMARY

San Onofre Nuclear Generating Station, Unit 1 NRC Inspection Report 050-00206/05-008

This inspection was a routine, announced inspection of decommissioning activities being conducted at San Onofre Nuclear Generating Station, Unit 1 facility. Areas inspected included organization, management and cost controls; decommissioning performance and status review; and occupational radiation exposure. Overall, the licensee was conducting decommissioning in accordance with regulatory and procedural requirements.

Organization, Management and Cost Controls at Permanently Shutdown Reactors

- The licensee had an organization in place that was sufficient to conduct decommissioning activities. Management level positions continued to be staffed with qualified individuals (Section 1.2.a).
- The licensee continued to implement an employee safety concerns program that allowed interested parties to submit concerns for independent review (Section 1.2.b).
- The licensee continued to implement a self-assessment program that included quarterly performance reviews and followup of events involving radiological material. The quarterly performance reviews were effective tools for identifying decommissioning program strengths and weaknesses. The radiological occurrence report program was being used by the licensee to identify and investigate radiological incidents. No adverse radiological trends were noted for 2004-2005 (Section 1.2.c).

Decommissioning Performance and Status Review at Permanently Shutdown Reactors

- The radiologically restricted area was adequately controlled. Postings, signs, and radiological boundaries were in compliance with regulatory requirements (Section 2.2.a).
- The licensee released about half of the spent fuel pool volume as liquid effluent since the last inspection. A review of the release records confirmed that the releases were below the limits established in the offsite dose calculation manual (Section 2.2.a).
- The licensee experienced a rigging incident when a restraint assembly was accidentally dropped within the spent fuel pool. Corrective actions included issuance of an apparent cause evaluation. The incident was not a nuclear safety concern because the spent fuel had been previously removed from the pool (Section 2.2.b).
- The inspector conducted radiological surveys of equipment about to be free-released from the Unit 1 industrial area. The survey results indicated that the equipment was free of residual radioactive material (Section 2.2.c).

- The licensee safely conducted a spent resin transfer during the inspection. Effective pre-job planning and tight control of plant operations and radiological health and safety were observed during the transfer (Section 2.2.d).
- The licensee continued to make progress with the remediation of the turbine building structure. The licensee may leave some building substructure components with low level contamination in place for an extended period of time. The licensee intends to decommission these components at a later date, unless the licensee obtains approval from the NRC and the property owner to leave the components in place (Section 2.2.e).

Occupational Radiation Exposure

- The licensee had an occupational exposure monitoring program that effectively monitored internal and external doses to radiation. No individual exceeded the regulatory limit for total effective dose equivalent exposures during 2004. Total exposures continued to decline. The licensee's As Low As Reasonably Achievable (ALARA) program was determined to be effective (Section 3.2).

Report Details

Summary of Plant Status

San Onofre Nuclear Generating Station, Unit 1 was permanently shut down during November 1992 and was permanently defueled by March 1993. The unit remained in SAFSTOR until June 1999, when decommissioning was initiated. At the time of this inspection, the licensee was conducting decommissioning activities under the DECON option as stated in its Post Shutdown Decommissioning Activities Report dated December 15, 1998. DECON is defined as the immediate removal and disposal of all radioactivity in excess of levels which would permit the release of the facility for unrestricted use.

Work completed since the previous inspection included removal of the single failure proof trolley from the Unit 1 turbine building gantry crane and installation of an opening in the northern portion of containment sphere for removal of debris from inside of containment. To support removal of the spent fuel racks, the licensee drained about half of the spent fuel pool (SFP) volume from the pool during December 2004. The fluid was processed, sampled, and released to the environment in accordance with the liquid discharge permit process during January 2005.

During the inspection, the licensee was actively decommissioning the interior of the containment sphere, upgrading the Unit 2 cask handling crane to support future removal of Unit 1 fuel from the Unit 2 SFP, cutting and removing the spent fuel racks from the Unit 1 SFP, and remediating the turbine building. On February 15, 2005, the licensee began decommissioning the valve penetration area (the area between outer containment wall and the sphere enclosure building inner wall) to remove all piping, valves and structural supports in this region.

At the end of the inspection period, the licensee began transferring the remainder of the SFP water to the refueling water storage tank for processing prior to release to the environment. Following draining of the pool, the licensee plans to remove all remaining debris from the pool floor and commence with decommissioning and demolition of the SFP structure.

1 Organization, Management and Cost Controls at Permanently Shutdown Reactors (36801)

1.1 Inspection Scope

The inspector reviewed the licensee's organizational structure to ascertain whether there was sufficient staff to support decommissioning activities. Also reviewed was the licensee's nuclear safety concern program to ascertain whether it was functioning in accordance with management directive requirements. Further, portions of the licensee's self-assessment programs were reviewed to ensure there was effective management control and oversight of current decommissioning activities.

1.2 Observations and Findings

a. Organizational Structure

The licensee's organizational structure is described in the defueled safety analysis report and the quality assurance (QA) program topical report. The organizational structure in place at the time of the inspection was compared to the required organizational structures. The inspector noted that the actual organizational structure was not in agreement with the required structures in one functional area. The duties and oversight responsibilities of the vice presidents had been reassigned. The licensee previously issued an action request during December 2004 to update the duties and responsibilities of the vice presidents in both the defueled safety analysis report and the QA program topical report.

The inspector concluded that supervisory and managerial level positions continued to be filled with qualified individuals dedicated to the decommissioning of Unit 1. At the time of the inspection, the licensee had sufficient staff for the work in progress in Unit 1.

b. Employee/Safety Concerns Program Review

The nuclear safety concerns program was reviewed to determine if the program allowed employees and other individuals to voice concerns related to Unit 1 activities. The program requirements were described in the licensee's Nuclear Organization Directive D-008. The nuclear safety concerns program was a stand-alone department that reported to the director-nuclear business & regulatory affairs. The nuclear safety concerns program manager was authorized to take concerns directly to the executive vice president-generation or the executive vice president-general counsel if the issue involved other vice presidents.

Employees could submit concerns via internal mail, U.S. Postal Service mail, telephone, electronic mail, in person, or drop boxes located throughout the plant. To ensure employee awareness, the nuclear safety program issued routine memorandums to plant personnel and issued handouts to incoming and outgoing personnel. The inspector discussed the 2004 results with the program manager. The licensee summarized its 2004 program in a letter to the NRC dated January 28, 2005. The inspector concluded that the licensee continued to maintain an employee safety concerns program in accordance with management directive requirements.

During April 2003, a contractor for the licensee conducted a nuclear safety culture survey. The survey concluded that the safety culture was "healthy." The nuclear safety concerns program was listed as one of the strengths of the safety culture survey. The next safety culture audit was planned for August 2005.

c. Management Controls

Management controls included quarterly self-assessments which were being used by the licensee to identify strengths and weaknesses in the decommissioning project. The last two quarterly reports for 2004 were reviewed and discussed with licensee

personnel. The quarterly reports also emphasized as low as reasonably achievable (ALARA) concepts, trending of events, and proposed activities to improve decommissioning performance. Several potential focus areas were identified including project delays in at least one area. The containment demolition schedule slipped due, in part, to underestimating the duration of preparation activities. Unit 1 management worked with the contractor to identify ways to recover the schedule.

The radiological occurrence report (ROR) program was used by the licensee to identify and review incidences involving radioactive material. The licensee issued 11 ROR assignments during 2004-2005. The inspector reviewed the ROR index for 2004-2005 and concluded that no adverse or repetitive trends were apparent.

In summary, the ROR program was being effectively used by the licensee to conduct detailed reviews of events involving radioactive material.

1.3 Conclusions

The licensee had an organization in place that was sufficient to conduct decommissioning activities. Management level positions continued to be staffed with qualified individuals. The licensee continued to implement an employee safety concerns program that allowed interested parties to submit concerns for independent review. The licensee continued to implement a self-assessment program that included quarterly performance reviews and followup of events involving radiological material. The quarterly performance reviews were effective tools for identifying decommissioning program strengths and weaknesses. The radiological occurrence report program was being used by the licensee to identify and investigate radiological incidents. No adverse radiological trends were noted for 2004-2005.

2 Decommissioning Performance and Status Review at Permanently Shutdown Reactors (71801)

2.1 Inspection Scope

The inspector evaluated whether the licensee and its contracted workforce were conducting decommissioning activities in accordance with license and regulatory requirements.

2.2 Observations and Findings

a. Site Tours/Control of Decommissioning Activities

The inspector conducted tours of the Unit 1 facility to observe radiological area postings and boundaries. Access to the restricted and contaminated areas was being controlled by radiation caution signs, barricades, boundary lines, locked doors, and gates. Radiological boundaries were well defined and postings were up-to-date in all areas. The inspector observed a noticeable reduction in the amount of radioactive wastes and equipment being stored in and around the former turbine building. This was indicative

that progress being made by the licensee towards the eventual free-release of the structure.

The licensee downgraded gaseous effluent radiation monitor R-1254 since the previous inspection. This monitor previously provided air particulate, iodide, and noble gas monitoring of the main plant ventilation stack. Since all spent fuel had been removed from the Unit 1 SFP, the remaining sources of iodide and noble gases had been eliminated. Accordingly, on November 18, 2004, the licensee began downgrading this monitor to a particulate sampler only. The modified monitor was returned to service on November 18, 2004. The inspector reviewed the associated engineering change package and concurred that the sources of iodide and noble gases had been eliminated.

Since the last inspection, the licensee drained about half of the SFP water from the pool. The licensee began draining the fluid on December 13, 2004, and completed the drain-down on December 28, 2004. The licensee removed about 210,000 gallons of fluid from the pool. The fluid was temporarily stored in the refueling water storage tank and west holdup tank. The drain-down was conducted, in part, to support the cutting and removal of spent fuel racks from the SFP.

The inspector reviewed the SFP water release records. The fluid was released in five batches that varied in volume from 35,000 to 47,000 gallons prior to dilution. Minor amounts of cobalt-60, cesium-137 and hydrogen-3 (tritium) were detected in the fluids prior to release. Following processing and sampling, the licensee began releasing the fluid to the environment through the liquid effluent outfall on January 5, 2004. The releases were completed by February 1, 2005. The fluid was diluted with ocean water and monitored via liquid effluent monitor R-1218 during the releases. The inspector confirmed that the releases were below the limits specified by the offsite dose calculation manual.

At the end of the onsite inspection, the licensee had completed the cutting and removal of the spent fuel racks. The licensee began final drain-down of the SFP on February 17, 2005. The fluid was being drained to the refueling water storage tank. The remaining SFP fluid will also be released to the environment at a later date, pending results of processing and sampling to ensure compliance with applicable release permits.

b. Rigging Incident

Since the previous inspection, the licensee experienced a rigging incident. On January 27, 2005, the licensee was in the process of lowering one of two Greater-Than-Class-C canister restraints into the SFP when the riggers accidentally dropped the load into the pool. The riggers were using tapered tip hooks on the 1945-pound restraint (an egg crate shaped assembly) which became disengaged while being lowered into the pool. Apparently, the restraint may have floated briefly, allowing the tapered hooks to disengage. Following disengagement, the restraint fell unimpeded approximately 12 feet to the bottom of the pool.

Immediate corrective actions included notifying the control room and conducting visual inspections of the pool floor with a camera. The control room operators began

monitoring the leak detection system for abnormal pool leakage. Further, a stop work order was issued to ensure that the causes of the event were clearly understood prior to restart of work. Based on preliminary information, the SFP liner was not significantly damaged or punctured. No evidence of abnormal pool leakage was observed by the operators.

Corrective actions included discussion of the incident with all heavy lift work groups, issuance of an apparent cause evaluation (part of the action request program) to fully investigate the causes of the event, banning use of tapered hooks in favor of shackles, improving pool lighting, and providing additional training for selected support personnel. The inspector noted that a nuclear safety concern did not exist because all spent fuel had been previously removed from the SFP. The NRC will continue to monitor the licensee's rigging practices to ensure that decommissioning activities are being conducted in a safe manner.

c. Radiological Survey of Unit 1 Components

The inspector conducted radiological surveys of items being free-released from the site. The components were surveyed for contamination using an Eberline E600 meter with SHP380AB alpha/beta probe (NRC No. 079977, calibration due date of March 24, 2005). The surveys consisted of 1-minute counts of beta particle contamination. The inspector first obtained several background readings from unimpacted areas outside of the radiologically restricted area. The average background measurement for beta particles was 192 counts per minute (cpm).

Ten items being free-released were surveyed for potential contamination. The components included cables, wires, cardboard, hoses, plywood, and wood boards. The measurements ranged from 178 cpm (cable/wires) to 269 cpm (plywood) with an average value of 212 cpm. The inspector concluded that all measurements were comparable to background levels, and the items were free of residual radioactive material.

d. Observation of Resin Transfer

The licensee conducted a resin transfer during the inspection period, an activity that the licensee did not normally conduct during Unit 1 decommissioning. The last resin transfer occurred during 1999. The resin was to be transferred from the spent resin storage tank to a portable high integrity container. The storage tank contained about 210 cubic feet of spent resin, and the licensee planned to transfer about half of the resin to the high integrity container.

Prior to the transfer, the licensee conducted a detailed pre-job briefing. The work participants included plant operators, radiation protection staff, and other support staff. Concerns with the transfer that were discussed included the potentially elevated dose rates to be encountered as the resins passed through plant piping and hoses. Contingency actions discussed included possible responses to accident and off-normal incidences such as a loss of power event.

During the inspection period, the licensee transferred the resin to the high integrity container, then dewatered and dried the resin. During the evolution, the licensee recognized that it had to defeat an interlock to complete the transfer. The liquid radwaste holdup tank low-level limit switch had failed, preventing the associated tank pump from starting. The licensee elected to defeat the interlock and continued with the transfer. Later that day, the Unit 1 shift supervisor recognized that he had authorized the change without a formal evaluation of the decision as required by internal procedures. Two action requests were written, one to troubleshoot the failed interlock and the second to review the shift supervisor's decision to bypass an interlock without performing the proper decision evaluation.

The inspector noted good pre-planning and communications during resin transfer. The inspector observed strong health physics and operations oversight of the transfer activity. The licensee planned to store the resin onsite for several months, in part, to allow for analysis of radioactivity content and to prepare the resin for permanent disposal.

e. Release of Turbine Building Structure

During the onsite inspection, the licensee continued to conduct decommissioning and radiological surveying activities in the turbine building. During the previous inspection (November 2004), the licensee conducted radiological confirmatory surveys of the turbine building floor using a third-party contractor. The contractor identified contamination in the northeastern corner of the building floor. The inspector conducted confirmatory surveys in the same area at about the same time and validated the licensee's discovery. These survey results affirmed that the turbine building floor had become re-contaminated after it had been remediated by the licensee.

The licensee conducted an investigation and concluded that the sources of contamination were from materials that remained in radiologically posted areas in the upper elevations of the turbine building. Apparently, rainwater cascading from the upper decks had transferred contamination to the turbine building floor. Corrective actions included removing the sources of contamination from the upper elevations of the turbine building and performing additional remediation of the turbine building floor. During the current inspection, the inspector noted that the licensee had removed most sources of contamination from the upper levels of the turbine building and had re-remediated the turbine building floor.

The inspector conducted a review of the licensee's plans to install grout or concrete slurry in some embedded piping, a sump, and building expansion joints in the turbine building substructure. The inspector questioned whether the turbine building substructure was to be left in place permanently. In a conference call conducted immediately after the onsite inspection, the licensee explained its long-term plans for Unit 1 decommissioning.

The licensee has divided the decommissioning process into phases. The first phase involves active dismantlement of Unit 1 site structures above the 8-foot, 6-inch elevation (elevation of turbine building floor). Structures below this elevation may be

decommissioned and removed, or left in place, depending on contamination levels. The licensee elected to leave some substructures in place on an interim basis, in part, because of the physical difficulties that would be encountered if the licensee tried to remove the structures during this phase of decommissioning.

The second phase was expected to begin after active decommissioning of the Unit 1 site was essentially complete. This phase is expected to commence about 2008 and will last until the end of demolition of Units 2 and 3. During this second phase, Unit 1 items to be monitored and maintained by the licensee will most likely include the independent spent fuel storage installation, the Unit 1 reactor pressure vessel (currently in storage onsite in a shipping container), any remaining substructures, and the yard sump. The third phase, scheduled to commence after demolition of Units 2 and 3, involves the site-wide removal of all remaining substructures unless the licensee is later allowed to leave the substructures in place. At that time, the licensee would conduct a site survey as necessary to confirm compliance with the NRC's release criteria.

In summary, the inspector confirmed that the licensee continued to make progress with the remediation of the turbine building structure, but the structure was not ready for free release at the end of the onsite inspection. Any substructure that is left in place during the current phase of decommissioning will be removed, remediated, or left in place with NRC and property owner approval by demonstrating compliance with the radiological criteria for license termination.

2.3 Conclusions

The radiologically restricted area was adequately controlled. Postings, signs, and radiological boundaries were in compliance with regulatory requirements. The licensee released about half of the spent fuel pool volume as liquid effluent since the last inspection. A review of the release records confirmed that the releases were below the limits established in the offsite dose calculation manual.

The licensee experienced a rigging incident when a restraint assembly was accidentally dropped within the SFP. Corrective actions included issuance of an apparent cause evaluation. The incident was not a nuclear safety concern because the spent fuel had been previously removed from the pool.

The inspector conducted radiological surveys of equipment about to be free-released from the Unit 1 industrial area. The survey results indicated that the equipment was free of residual radioactive material.

The licensee safely conducted a spent resin transfer during the inspection period. Effective pre-job planning and tight control of plant operations and radiological health and safety were observed during the transfer.

The licensee continued to make progress with the remediation of the turbine building structure. The licensee may leave some building substructure components with low level contamination in place for an extended period of time. The licensee intends to

decommission these components at a later date, unless the licensee obtains approval from the NRC and the property owner to leave the components in place.

3 Occupational Radiation Exposure (83750)

3.1 Inspection Scope

The inspector reviewed occupational radiation exposures for calendar year 2004 to verify whether they met the limits specified in 10 CFR Part 20. This review focused on the licensee's internal and external occupational radiation exposure monitoring programs as well as the ALARA program.

3.2 Observations and Findings

Occupational exposures consisted of both external and internal exposures. To measure external exposures, plant personnel entering the radiologically restricted areas were assigned both thermoluminescent dosimeters (TLDs) and direct reading electronic dosimeters. The licensee maintained records of external exposures based on electronic dosimeters until the TLD results were available. Whole body counting and in vitro bioassays were used to detect the presence of radioactive material in the body. An internal exposure assessment was conducted if a whole body count or a bioassay identified internal deposition of radioactive material. Internal doses, if any, were assigned as part of the internal exposure assessment process.

The inspector reviewed the Unit 1 occupational exposure records for 2004. The licensee issued dosimetry to measure for both gamma and neutron doses during 2004. Neutron doses were anticipated because of spent fuel handling operations.

During 2004, 1623 TLDs were issued to measure gamma doses, up slightly from 2003 (1532 TLDs). Of that number, 171 individuals received a measurable gamma dose. The combined total effective dose equivalent for all 171 individuals was 13.763 person-rems, down from 2003 (34 person-rems) and 2002 (61 person-rems). In addition, workers were monitored for neutron doses. During 2004, 30 individuals received a measurable neutron dose. The total neutron dose was 1.168 person-rems, slightly lower than the collective neutron dose for 2003 (1.456 person-rems).

During 2004, the highest total effective dose equivalent to an individual working in Unit 1 was 0.494 rems, down from 2003 (1.343 rems). The highest neutron dose for 2004 was 0.085 rems. The NRC's regulatory total effective dose equivalent limit is 5 rems. No individual exceeded the regulatory limit. The reduction in collective doses was a result of a reduction in the source term (amount of radioactive material present in Unit 1) and improvements in both job planning and ALARA practices.

Two contamination events resulted in assignment of internal doses to four individuals. During January 2004, three individuals became internally contaminated during the removal of safety injection recirculation pump from containment. Although the individuals were wearing respirators, each worker experienced an uptake of low level

amounts of cesium-137 and cobalt-60. Based on the results of whole body counts, the licensee assigned committed effective dose equivalents of 4 to 6 millirems (0.004-0.006 rems) to the three individuals.

The second event occurred during December 2004. While working in the spent fuel building, three workers became externally contaminated while handling pieces of spent fuel racks. A worker had facial contamination upon exiting the Unit 1 radiological restricted area. A whole body count identified small amounts of cesium-137 and cobalt-60 in the worker's body. A committed effective dose equivalent of 4 millirems (0.004 rems) was assigned to the individual. The other two workers did not receive an uptake of radioactive material.

The inspector reviewed the two incidents and determined that neither were representative of a negative performance trend. Further, the assigned doses were well below 10 percent of the total effective dose equivalent limit of 5 rems and were small fractions of the external doses. The licensee took corrective actions in response to each incident, including ALARA reviews. The licensee's actions in response to each incident were considered conservative and appropriate for the circumstances.

The inspector reviewed the licensee's ALARA program. Overall, the licensee had a strong ALARA program in place for Unit 1. Performance indicators were tracked and evaluated, including ALARA exposure goals. The original exposure goal for 2004 was 33 person-rems. The licensee updated the exposure goal during 2004 based on changing work schedules. The final goal was subsequently determined to be 24 person-rems because some work was deferred into 2005.

Actual exposures, based on electronic dosimetry, was 17.252 person-rems during 2004. The top three tasks that resulted in doses, in order, were health physics support functions, spent fuel transfer activities, and containment demolition and decontamination activities. Total exposures should continue to decrease as decommissioning is completed and sources of radiation are removed from the site.

The ALARA goal for 2005 was 21.5 person-rems based on the work activities planned for the calendar year. The two work projects with the highest potential for exposure were spent fuel building demolition and containment demolition.

The inspector noted that the licensee conducted an assessment of electronic dosimeter results versus TLD results. Outliers, if any were to exist, would be reviewed by the licensee. The licensee conducted this assessment using industry-sponsored guidance.

On December 20, 2004, the licensee submitted a license amendment request to the NRC to begin using weighting factors for external exposure assessment. In particular, the licensee requested authorization to implement the guidance of American National Standards Institute document HPS N13.41-1997, "Criteria for Performing Multiple Dosimetry." This amendment request was made, in part, to improve the assessments of dose based on non-uniform radiation fields. At the end of the inspection period, the NRC had not approved the licensee's amendment request.

3.3 Conclusions

The licensee had an occupational exposure monitoring program that effectively monitored internal and external doses to radiation. No individual exceeded the regulatory limit for total effective dose equivalent exposures during 2004. Total exposures continued to decline. The licensee's ALARA program was determined to be effective.

4 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the exit meeting on February 18, 2004. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspector.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

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S. Eichenberger, Unit 1 Health Physics Supervisor
M. Kirby, Unit 1 Shift Supervisor
M. McBrearty, Engineer, Nuclear Regulatory Affairs
D. Nunn, Vice President, Engineering & Technical Services
R. Waldo, Station Manager

INSPECTION PROCEDURES USED

| | |
|-------|--|
| 36801 | Organization, Management and Cost Controls at Permanently Shutdown Reactors |
| 71801 | Decommissioning Performance and Status Review at Permanently Shutdown Reactors |
| 83750 | Occupational Radiation Exposure |

ITEMS OPENED AND CLOSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

| | |
|-------|---------------------------------|
| ALARA | as low as reasonably achievable |
| cpm | counts per minute |
| QA | quality assurance |
| ROR | radiological occurrence report |
| SFP | spent fuel pool |
| TLD | thermoluminescent dosimeter |