



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4005**

May 29, 2003

Mr. James Shetler, Assistant General Manager
Energy Supply
Sacramento Municipal Utility District
6201 'S' Street
P.O. Box 15830
Sacramento, California 95852

SUBJECT: NRC INSPECTION REPORT 50-312/2003-02; 72-11/2003-01

Dear Mr. Shetler:

An NRC inspection was conducted April 8-10, 2003, at your Rancho Seco Nuclear Generating Station. On April 10, 2003, at the conclusion of the inspection, a preliminary exit briefing was conducted with Mr. Steve Redeker, Plant Manager, and other members of your staff. On May 6, 2003, a final telephonic exit briefing was conducted with Mr. Redeker. The enclosed report presents the scope and results of that inspection.

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. Within these areas, the inspection included reviews of the status of decommissioning, physical security program, occupational radiation exposures and effluent and environmental monitoring. Nine inspection follow-up items related to your Independent Spent Fuel Storage Installation and emergency planning were closed. Although no violations were identified during this inspection, an unresolved item was identified related to the interior of the primary alarm station being visible from the visitor's window. An unresolved item is a matter about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. At this time no additional information is requested. We are seeking technical assistance on this matter from NRC headquarters. Although a final determination has not been made regarding this issue, your staff informed the inspectors that as of April 28, 2003, you have taken voluntary measures to prevent the interior of the primary alarm station from being visible from the visitor's window.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you provide one, 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 Emilio M. Garcia at (530) 756-3910 or the undersigned at (817) 860-8191.

Sincerely,

/RA/

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

Docket Nos.: 50-312; 72-11
License Nos.: DPR-54; SNM-2510

Enclosure:
NRC Inspection Report
050-312/2003-02;072-11/2003-01

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ADAMS: Yes No Initials: EMG

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

DOCUMENT NAME: draft: s:\dnms\fcdb\emg\rs03-02.wpd final r:_dnms

RIV:DNMS:FCDB	FCDB	DRS:PSB	ACES:SAC	C:FCDB
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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-312; 72-11

License Nos.: DPR-54; SNM-2510

Report Nos.: 50-312/2003-02; 72-11/2003-01

Licensee: Sacramento Municipal Utility District

Facility: Rancho Seco Nuclear Generating Station

Location: 14440 Twin Cities Road
Herald, California

Dates: April 8 - May 6, 2003

Inspectors: Emilio M. Garcia, Health Physicist
Thomas W. Dexter, Security Inspector
Gregory A. Pick, Security Inspector

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

Attachments: Supplemental Information
Partial List of Documents Reviewed

ADAMS Entry : IR 05000312-03-002 on 04/08-5/06/03; Sacramento Municipal
Utility District; Rancho Seco Nuclear Generating Station.
Decommissioning Report; No Violations.

EXECUTIVE SUMMARY

Rancho Seco Nuclear Generating Station
NRC Inspection Report 50-312/2003-02;72-11/2003-01

All spent fuel had been removed from the spent fuel pool to the Independent Spent Fuel Storage Installation (ISFSI). The licensee was continuing its dismantling activities in the reactor, auxiliary, and spent fuel buildings. The licensee had shipped all 11 spent fuel pool racks to a disposal site. The reactor head had been removed from the reactor.

Decommissioning Performance and Status Review

- The licensee was continuing its dismantling activities in the reactor, auxiliary and spent fuel buildings in a safe manner (Section 1).
- The licensee found a few areas of low-level fixed contamination on a container received as free release from another licensee. Appropriate followup action was initiated (Section 1).

Physical Security Assessment

- Security Plan changes were submitted in accordance with NRC requirements, and the changes did not decrease the effectiveness of the Physical Security Plan (Section 2.1.1).
- The audit and assessments of the security program were performance based, and their overall quality was good (Section 2.1.2).
- Alarm station and security radio communication systems were effectively maintained. Alarm station operators were alert and adequately trained. An adequate number of portable radios were available for members of the security organization. Local Law Enforcement Agencies provide excellent support. An unresolved item related to the interior of the primary alarm station being visible from the visitor's window was identified (Section 2.1.3).
- The testing and maintenance of security equipment were completed and properly documented (Section 2.2.1).
- Very good protective area barrier and detection systems were in place that would provide delay and detection to individuals attempting unauthorized entry. Additionally, the protected area barrier and detection system effectively limited access to only authorized personnel (Section 2.2.2).
- Security training was conducted in accordance with the security training plan and procedures. Security officers generally demonstrated good knowledge of the procedural

requirements for the task that they were performing. Training records were current (Section 2.3.1).

- Management support for the licensee's security program was good (Section 2.4.1).
- On-shift staffing of armed security officers was properly maintained (Section 2.4.2).
- The licensee had implemented NRC Interim Compensatory Measures Order, dated May 23, 2002, in a timely and effective manner. The NRC may undertake a focused review of the implementation of the Order in the future using guidance being developed (Section 2.5).

Occupational Radiation Exposure

- The audit and assessments of the occupational radiation safety program were performance based, and their overall quality was very good (Section 3.1).
- The licensee was maintaining an effective program to monitor occupational radiation exposures. Occupational exposures for calendar year 2002 were below regulatory limits (Section 3.3).

Effluent and Environmental Monitoring

- The audit and assessments of the effluent and environmental monitoring program were performance based, and their overall quality was very good (Section 4.1).
- As a result of removal of all spent fuel from the auxiliary, reactor, and fuel handling buildings, the licensee had appropriately revised its offsite dose calculation manual to remove the gaseous effluent pathway (Section 4.2).
- The Annual Radiological Environmental Operating Reports for calendar years 2001 and 2002 were properly prepared and submitted on a timely basis. The observed potential radiological impacts were either not detectable or a small fraction of the applicable limits (Section 4.4).
- The 2002 Annual Radioactive Effluent Release Report was well prepared and submitted on a timely basis. Radioactivity in gaseous and liquid effluents in 2002 did not exceed applicable limits (Section 4.5).

Report Details

Summary of Facility Status

The Rancho Seco facility was undergoing active decommissioning with dismantlement work in the auxiliary, reactor and spent fuel buildings. In addition, the licensee had removed all 493 spent fuel assemblies from the spent fuel pool. Twenty-one canisters had been loaded with spent fuel and transferred to the Independent Spent Fuel Storage Installation (ISFSI).

Overall, site decommissioning work was progressing safely with significant work completed since the last NRC inspection. Good radiological controls by the health physics personnel in the reactor, auxiliary and spent fuel buildings were observed during the tours of work activities. The amount of material awaiting removal from the work areas was adequately controlled with no backlog of scrap observed that would present a safety hazard to workers in the area.

1 Decommissioning Performance and Status Review (IP 71801)

1.1 Inspection Scope

The licensee's dismantlement activities were reviewed. Tours of the site were conducted to observe work activities underway, including observation of housekeeping, safety practices, fire loading and radiological controls.

1.2 Observations and Findings

Tours of the reactor, auxiliary, and spent fuel buildings, and other areas of the plant were conducted to observe dismantling and decommissioning activities in progress. The work observed was being conducted in a safe and orderly manner. Radiological controls, including postings and barriers, were in place as needed. The inspectors noted good housekeeping and fire protection practices. Major activities observed are noted below under each facility area.

a. Reactor Building

The licensee had completed de-tensioning the reactor head studs and the removal of the control rod drive mechanisms from the top of the reactor head. The reactor head was removed from the reactor and was being evaluated for possible disposal options. Work is ongoing for the removal of electrical conduits throughout the building and floor grates around the steam generators. The inspectors noted that access to areas where grating had been removed had been covered or a personnel barrier placed to prevent falls. The inspectors noted good housekeeping, radiological and fire protection practices.

b. Auxiliary Building

Work was ongoing to section and remove the A and B Coolant Waste Receiver Tanks, two large tanks in the underground tank farm. These two tanks were the only remaining

major components in the auxiliary building. The inspectors noted good housekeeping, radiological and fire protection practices.

c. Fuel Handling Building

All 11 spent fuel storage racks had been removed from the fuel handling building and shipped to a disposal site. Most of the water had been removed from the pool. Planning for the segmentation of the stainless steel liner was progressing. During the week of the inspection, auxiliary equipment attached to the side of the pool was being dismantled and removed. The inspectors noted good housekeeping, radiological and fire protection practices.

The spent fuel pool storage racks were sent for disposal to a radioactive waste disposal site. During the unloading of one of the racks at the disposal site, the slings attached to the rack were cut by the sharp edges of the rack and the rack dropped onto the bottom of the transport container (shipping box). No injuries or radiological release occurred as a result of this incident. The box was surveyed by the disposal site staff for free release and returned to Rancho Seco on January 9, 2003. The box arrived at Rancho Seco on January 13, 2003. The licensee's staff briefly examined the box on their parking lot and forwarded the box to a fabrication shop as a guide for sizing and constructing a replacement. Since the box had been received as a free release item and since it had not been in a radiological controlled area since received from the disposal site, the licensee did not conduct any radiological surveys. The damaged box was returned to the licensee on March 3, 2003. This time, the licensee conducted a radiological survey prior to releasing the box as scrap. This survey identified no removable contamination, but fixed contamination on a number of locations on the bottom of the box, on the corner which bore the brunt of the rack when it fell and on the gasket. The highest amount was 1000 corrected counts per minute on the gasket. The licensee initiated PDQ 03-0007 for tracking and addressing the incident and notified the disposal site.

Although there is no significant health effects from these small amounts of radioactive contamination, NRC regulations do not permit the transfer or possession of any licensed material to any entity not licensed or exempted from license. By the disposal site improperly classifying the box as free of contamination it meant that the box could be transferred to some one without a licensee, which is exactly what Rancho Seco did.

1.3 Conclusion

The licensee was continuing its dismantling activities in the reactor, auxiliary and spent fuel buildings in a safe manner. The licensee found a few areas of low-level fixed contamination on a container received as free release from another licensee. Appropriate followup action was initiated.

2 Physical Security Assessment (IP 81001)

2.1 Conduct of Security and Safeguards Activities

2.1.1 Security Plans and Procedures

a. Inspection Scope

The Rancho Seco ISFSI Physical Security Plan (PSP), Amendment 1, dated August 26, 2002, and implementing procedures were inspected to determine if the requirements of 10 CFR 73.51 were met. The PSP incorporated the contingency plan.

b. Observation and Findings

The inspectors determined from a review of the plan that changes to the licensee's NRC-approved PSP did not decrease the effectiveness of the plan. Plan changes were submitted in accordance with NRC requirements. The inspectors determined that the licensee maintained an effective management system for the development and administration of procedures and verified that, with one exception, the procedures were consistent with the requirements of the PSP. That exception is discussed in paragraph 2.2.1.

c. Conclusions

Security Plan changes were submitted in accordance with NRC requirements, and the changes did not decrease the effectiveness of the plan.

2.1.2 Security Audits and Assessments

a. Inspection Scope

The inspectors reviewed Security Surveillance Reports and Implementation of NRC Interim Compensatory Measures 022170003 dated November 4, 2002, to determine compliance with the requirements of the PSP.

b. Observations and Findings

The inspectors confirmed that members of the audit teams were independent of plant security management. The inspectors determined that the audit team personnel were qualified and the audit and assessments reviewed all requirements in the PSP and additional requirements in the IMC Order. The audits and assessments were conducted in a timely manner.

c. Conclusions

The audit and assessments of the security program were performance based, and their overall quality was good.

2.1.3 Alarm Station and Communications

a. Inspection Scope

The Primary Alarm Station (PAS), Secondary Alarm Station (SAS) and security communication capabilities were inspected to determine compliance with the requirements of the security plan. The areas inspected included the requirements and capabilities of the alarm station, protection of the PAS, systems security, operability of the radio and telephone systems, and the capability to effectively communicate with the local law enforcement agencies through both communication systems.

b. Observations and Findings

By observation, review of engineering drawings, and interviews, the inspectors determined that the PAS was located in a hardened facility within the downtown office building of the utility. On the morning of April 9, 2003, three inspectors, accompanied by three members of the security staff inspected the PAS. The PAS is located in a facility that also processes visitors to the facility. A visitor can observe the alarm monitors of the ISFSI through the processing window. If an alarm must be assessed, it can be assessed on a larger monitor which a visitor could see even more clearly. Construction Project Drawings and other drawings related to the Security Window and the security access doors were reviewed.

The inspectors also reviewed the licensee's letter AGM/ES 03-015, dated March 20, 2003, regarding the visibility of the ISFSI security monitors by members of the public at the primary alarm station. The licensee's security plan states, in part, ". . . the interior will not be visible from outside the facility." The licensee believes that the terminology "outside the facility" applies to the exterior of the building housing the PAS and not the boundary of the alarm station within the facility. 10 CFR 73.51(d)(3) states, in part, "The Primary Alarm Station must be located within a protected area; have bullet-resisting walls, doors, ceiling and floor; and the interior of the station must not be visible from outside the protected area." The boundary of the PAS protected area was the interior wall with the visitor's window located in it. Contrary to the above, the inspectors determined that the interior of the primary alarm station was visible from outside the protected area.

During the exit meeting, the Licensee stated that it was in compliance with its PSP since the actual physical setup of the PAS had been observed and then approved by the licensing authority. Although the licensee believed they were in compliance with their PSP, the licensee did present the inspectors with a letter dated April 10, 2003, in which they initiated the actions to address the issue. A work request was submitted to install Reflective Film on the visitor's window (Control Ticket Number 13036025). The reflective film will be installed in a fashion to eliminate visibility of sensitive areas while allowing visual contact with the security officer immediately in front of the window (necessary to facilitate business with the security officer). Additionally, a partition will be installed on the interior to eliminate side visibility from the clear area of the window. The film and partition are expected to be installed by April 23, 2003. This matter is considered an unresolved item (URI) and will track as URI 72-11/0301-01. An

unresolved item is a matter about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. At this time no additional information is requested. The Region IV office plans to seek technical assistance on this mater from NRC headquarters.

The alarm station was equipped with appropriate alarm, surveillance, and communication capability. An alarm station operator whose duties did not interfere with the execution of assessment and response functions continually manned the alarm station. The inspectors determined that the alarm station operators were alert, trained, and capable of calling for assistance from the local law enforcement agency. One alarm station operator had some difficulty operating the assessment aids system suggesting that the individual should receive more training on the system to improve his proficiency. This was discussed with the licensee prior to and at the exit meeting.

The inspectors verified that the licensee had effective radio and telephone systems capable of meeting communication requirements. The licensee maintained an adequate number of portable radios for use by members of the security organization. Communication checks with the local law enforcement authority were conducted at least once each 24 hours.

During the morning of April 8, 2003, the inspectors and two members of the security staff visited the local law enforcement agency communications center. The inspectors interviewed the dispatcher on duty and received an in-depth briefing on the response, communications, and alarm monitoring capabilities at the communication center. The dispatcher demonstrated an outstanding knowledge of the entire system used to support the plant security force. The same individuals met with the captain in charge of the station. The captain was very knowledgeable of the site and response requirements. Local Law Enforcement Agency was providing excellent support to the plant security program.

c. Conclusions

Alarm station and security radio communication systems were effectively maintained. Alarm station operators were alert and adequately trained. An adequate number of portable radios were available for members of the security organization. Local Law Enforcement Agency provides excellent support. An unresolved item related to the interior of the primary alarm station being visible from the visitor's window was identified.

2.1.4 Protected Area Access Control of Personnel, Packages, and Vehicles

a. Inspection Scope

The access control program for personnel, packages, and vehicles was inspected to determine compliance with the requirements of the security plan.

b. Observations and Findings

Through observation and interviews, the inspectors determined that upon entering the protected area, authorized personnel have their security photo identification card checked against an approved access authorization list by a posted security officer. Authorized personnel escorted visitors who had to conduct business within the building.

Additionally, through observations, the inspectors determined that the licensee's search program for firearms, explosives, incendiary devices, and other unauthorized material met the requirements of the security plan. A security force member responsible for monitoring access into the protected area also conducted hands-on searches of all persons entering the protected area.

All vehicles entering the security area surrounding the protected area were searched at a vehicle barrier. The vehicle barrier was located at an adequate distance from the facility to meet the land vehicle bomb blast requirements.

c. Conclusions

A good program for searching personnel, packages and vehicles entering the protected area was implemented and maintained.

2.1.5 Records and Reports

a. Inspection Scope

The safeguard event logs for the first quarter of 2003 were inspected to determine compliance with the requirements of the PSP.

b. Observations and Findings

The inspectors determined that the licensee conformed to the regulatory requirements regarding the reporting of events. The necessary records were available for review and were maintained for the time frame required by regulations.

c. Conclusions

A properly maintained record and reports program was in place. The security staff was correctly reporting security events.

2.2 Status of Security Facilities and Equipment

2.2.1 Testing and Maintenance

a. Inspection Scope

The testing and maintenance program was reviewed to determine compliance with the requirements of the security plan.

b. Observations and Findings

Through interviews with security officers and supervisors, the inspectors determined that repairs to security equipment were completed in a timely manner. Through a review of testing records, the inspectors verified that security equipment and tamper alarms were performance tested as required by the security plan. On April 9, 2003, the inspectors observed a member of the security staff perform functional testing of security equipment. Tamper alarms were also tested. The equipment performed as designed.

While reviewing Testing and Maintenance Procedure Eighteen Month Interval ISFSI Security System Test, Number SP. 534, Revision 3, dated April 18, 2001, the inspectors noted that the procedure did not include a jump test of the system as required by the security plan. The last test documented occurred 17 months ago, on November 15, 2001. Consequently, the licensee was not in violation of their security plan. The licensee initiated action to correct this discrepancy and included a jump test requirement in the procedure.

c. Conclusions

The testing and maintenance of security equipment were completed and properly documented. The testing and maintenance procedure did not require one test listed in the security plan. The licensee corrected this discrepancy.

2.2.2 Protected Area Barrier and Detection Aids

a. Inspection Scope

The protected area physical barriers and detection aids were inspected to determine compliance with the PSP. The areas inspected included features of the protected area barrier and the design and capabilities of the detection aids system. (Note: The licensee had no vital areas or vital equipment as defined in 10 CFR 73.2.)

b. Observations and Findings

Through observation, the inspectors determined that gates and/or doors in the protected area (the ISFSI and the PAS) barriers were locked and/or alarmed, and they were installed and maintained as described in the PSP. The inspectors also determined that the protected area barrier provided penetration resistance to both forced and

surreptitious entries, was adequate to ensure delay of a potential adversary and effectively limited access to only authorized personnel.

The inspectors determined that all alarms annunciated in a continuously manned alarm station. The inspectors verified that the licensee's tests of the protected area barrier were adequate to ensure that system failures may be discovered and corrected.

c. Conclusions

Very good protective area barrier and detection systems were in place that would provide delay and detection to individuals attempting unauthorized entry. Additionally, the protected area barrier and detection system effectively limited access to only authorized personnel.

2.2.3 Assessment Aids

a. Inspection Scope

The assessment aids were inspected to determine compliance with the PSP. The areas inspected included the closed-circuit television monitors located in the alarm station.

b. Observations and Findings

The inspectors observed the assessment aids and determined that the system was adequate. Through observations, the inspectors verified that each closed-circuit television camera produced an adequate image on a monitor in the security alarm station. However, the inspectors did note that there was an area where two cameras did not overlap adequately and produced a blind spot between two cameras of approximately 15 feet. The licensee has a video capture system that provides assessment of the area in the event of an intrusion alarm. This deficiency was discussed with the licensee and they indicated they would adjust the cameras to cover the blind spot in the future. Through interviews, the inspectors determined that prompt maintenance support was provided to ensure that system problems were corrected in a timely manner.

c. Conclusions

Assessment aids provided good assessment and produced an adequate image on the monitors in the security alarm station. A blind spot between two cameras was identified and the licensee indicated they would correct the deficiency.

2.2.4 Compensatory Measures

a. Inspection Scope

The compensatory measures were inspected to determine compliance with requirements of the PSP. The areas inspected included deployment of compensatory measures and the effectiveness of those measures.

b. Observations and Findings

Through interviews with security officers and plant management personnel and a review of the PSP, the inspectors confirmed that the licensee deployed compensatory measures in a manner consistent with the requirements of the PSP. Through interviews, the inspectors determined that the security personnel available for assignment to compensatory security posts were properly trained for those duties.

c. Conclusions

The compensatory measures' program was effectively implemented. Security force personnel were well trained on program requirements.

2.2.5 Security System Power Supply

a. Inspection Scope

The security system power supply was inspected to determine compliance with the PSP.

b. Observations and Findings

The security plan requires that sufficient backup power be provided to the security computer, alarm system, and radio communications system. The licensee has provided this backup power through an uninterruptible power supply (UPS) system. Through observations, interviews, and a review of testing records, the inspectors determined that the system could perform as designed.

c. Conclusions

The licensee had a reliable backup power supply system to ensure the security system continued to be effective during a loss of primary power.

2.2.6 Security Locks, Keys, and Combinations

a. Inspection Scope

The locks, keys, and combination program were inspected to determine compliance with the security plan.

b. Observations and Findings

Through a review of lock and key procedures and records, the inspectors determined that inventories were completed as required. The records indicated that the locks and keys were rotated or changed as required. Records of keys, locks, core sets, and all changes were being maintained.

c. Conclusions

A good lock and key program was implemented and maintained.

2.3 Security Staff Training and Qualification

2.3.1 Personnel Training and Qualification

a. Inspection Scope

The licensee's security training and qualification program was inspected to determine compliance with the requirements of the training and qualification plan.

b. Observations and Findings

The inspectors observed and interviewed security officers during the performance of their duties. The security officers generally demonstrated good knowledge of the procedural requirements for the task that they performed.

All training was conducted in accordance with the approved security, training, and contingency plans. The inspectors confirmed, by a review of approximately five training records, that the required training had been conducted within the time frame required by the training and qualification plan.

c. Conclusions

Security training was conducted in accordance with the security training plan and procedures. Security officers generally demonstrated good knowledge of the procedural requirements for the task that they were performing. Training records were current.

2.4 Security Organization and Administration

2.4.1 Management Support

a. Inspection Scope

The effectiveness and adequacy of management support to the physical security program was inspected.

b. Observations and Findings

The inspectors interviewed security officers on shifts and determined from their comments that licensee management support of the security organization was good. The inspectors determined that an adequately trained and qualified security staff implemented the security program. All members of the security organization had a good understanding of their duties and responsibilities.

c. Conclusions

Management support for the licensee's security program was good.

2.4.2 Staffing Levels

a. Inspection Scope

Staffing levels of the security shifts was inspected to determine compliance with the PSP.

b. Observations and Findings

The inspectors determined from discussions with security supervisors and reviewing the security shift personnel rosters that there were an adequate number of security officers always available to meet the number specified in the PSP.

c. Conclusions

On-shift staffing of armed security officers was properly maintained.

2.5 Miscellaneous Security and Safeguard Issues

2.5.1 Licensee's Implementation of NRC Interim Compensatory Measures Order

a. Inspection Scope

The licensee's implementation of the NRC Interim Compensatory Measures Order issued on May 23, 2002, was inspected to determine if the licensee had satisfactorily implemented all provisions of the Order within the required time frame specified. The Order is a safeguards document and consequently only paragraphs or section numbers and titles will be addressed in the observations and findings.

b. Observations and Findings

During the course of the inspection, the inspectors determined by observation, discussion with security and plant management staff, and a review of the security, emergency, and contingency plan and security procedures that the licensee had effectively implemented paragraphs B.1-4 of the Order. The inspectors reviewed engineering calculations, discussed the computer program the engineer used to conduct the barrier calculations, and walked down the barriers. The inspectors interviewed plant management, security officers, reviewed the security plan and procedures, and determined that the licensee had revised their procedures, and trained personnel on the new and revised procedures. The inspectors confirmed that the licensee had established specific patrols, coordinated activities with law enforcement agencies, and verified that all responders could effectively communicate and that communications could be maintained. The inspectors also reviewed the physical security plan and the

site emergency plan and determined that the emergency action levels and mitigative measures had been addressed. The inspectors determined that the licensee had effectively implemented the NRC Order. The NRC may undertake a focused review of the implementation of the Order in the future using guidance being developed.

c. Conclusions

The licensee had implemented NRC Interim Compensatory Measures Order, dated May 23, 2002, in a timely and effective manner. The NRC may undertake a focused review of the implementation of the Order in the future using guidance being developed.

3 Occupational Radiation Exposure (83750)

3.1 Audits and Surveillances

a. Inspection Scope

The inspectors reviewed audits and surveillance reports, related to occupational radiation safety, that were conducted in 2002 and 2003, and issued as of March 26, 2003. The audit and surveillances were reviewed to determine implementation of the commitments made in the Section XVIII, Audits, of the Rancho Seco Quality Manual as it relates to the occupational radiation safety. The inspectors also reviewed qualification records for individuals involved in the audit or surveillances.

b. Observations and Findings

The inspectors confirmed that the audit and surveillances were conducted per the commitments in the Rancho Seco Quality Manual. The licensee had procedures that implement the audit program and audit plans which identified the scope and requirements of activities audited. The individuals that conducted the audit and surveillances were independent of the radiation protection management. The audit used an approved check lists. The audit team personnel were qualified and authorized to perform the audits or surveillances in the areas audited. The audits and assessments were conducted in a timely manner.

c. Conclusions

The audit and assessments of the occupational radiation safety program were performance based, and their overall quality was very good.

3.2 Changes

a. Inspection Scope

The inspectors discussed and reviewed major changes since the last inspection in organization, personnel, facilities, equipment, programs, and procedures with cognizant licensee staff to determine if they negatively affected occupational radiation protection.

b. Observations and Findings

The major change that had occurred since the last inspection of this subject area was that all of the spent fuel had been moved to ISFSI, substantially reducing the radiological conditions at the fuel handling building. As a result, the licensee had revised or eliminated many procedures that were no longer applicable, including procedure RP305.40, RP Responder. This procedure had permitted personnel from the operations department to conduct some radiological surveys during times when the radiation protection (RP) staff were not available at the site.

The licensee had also changed the configuration of the principal access and egress point to the radiologically controlled area (RCA) to better define the area boundaries. New computers had been in place at the access/egress point although there had been no software update.

Procedure 305.09, Contamination Limits and Plant Control for Plant Surface, had been revised to redefine what constituted a "hot particle." This change was consistent with industry practice and the revision of 10 CFR Part 20 from a point source to 1-square centimeter source.

The licensee had deployed a few new radiological survey instruments including the FH 40G Tele-probe and the Eberline™ E600 data logger with a "smart probe." In 2002, the licensee had added two additional Canberra™ ApTez™, personnel contamination monitors in addition to the two ApTez™ that had been deployed in 2001. These monitors had been purchased to replace the aging Eberline™ PCM and due to their improved alpha discrimination.

c. Conclusions

The inspectors concluded that all these changes (revised procedures, configuration of the principal access and egress point to the radiologically controlled area, and new instruments) had a positive effect on occupational radiation protection.

3.3 External and Internal Exposure Control and Other Radiation Protection Inspection Areas

a. Inspection Scope

The licensee's personnel radiation monitoring program and associated reports submitted were inspected for compliance with applicable requirements and commitments.

b. Observations and Findings

The licensee was using Luxel™ optically stimulated luminescence (OSL) dosimeters for evaluating beta/gamma external doses, and Nutrack™ for neutron exposures. These dosimeters were provided by Landauer, who was accredited under the National

Voluntary Laboratory Accreditation Program (NVLAP) for the type of dosimeters used. In addition, the licensee used electronic dosimeters for controlling the day-to-day personnel exposure between the times the Luxel™ and Nutrack™ were read by the dosimeter vendors. The licensee used the computerized dose tracking system ProRad™ for reading the electronic dosimeters and automatically assigning the estimated dose to the individual.

If the monitoring device, Luxel™ or Nutrack™, or the direct reading/electronic dosimeters reported greater than 0.100 rem and the values between the monitoring device and direct reading/electronic dosimeters differ by more than ± 20 percent the licensee conducted an evaluation to determine the dose to be assigned. This evaluation was required by Step 4.4 of Dosimetry Manual procedure RP.312.1.13, Abnormal Dosimetry Reports, Revision 3. The inspectors discussed this process with the supervisor radiation engineering specialist and reviewed recent monitoring device/dosimeter difference evaluations. None of the differences reviewed would result in a regulatory limit being exceeded and the resulting assigned doses appeared reasonable.

The licensee used general and work zone air sampling to monitor, evaluate and control potential internal exposures. Additionally, annual and as needed whole body count bioassays were used to determine committed doses.

During CY 2002 and as of April 10, 2003, no individual had been classified as a declared pregnant worker, and no planned special exposures had been conducted.

No new personnel joined the RP Department in 2002. The inspectors reviewed the on-the-job training manual assigned to an employee hired in 2001. This training manual consisted of a sign-off list of tasks and skills to be demonstrated. This training manual appeared to be consistent with the licensee procedure RP.305.22, Departmental Training and Qualification.

On April 3, 2003, the licensee submitted its annual report of individual monitoring for calendar year 2002. NRC Form 5 was attached for each individual that was monitored. The inspectors noted that the report was submitted on a timely basis as required by 10 CFR 20.2206(c). The inspectors reviewed the dosimetry files of selected individuals to determine if the required report had been submitted. The NRC Form 5's reviewed were complete and included all the information required. The inspectors concluded that the licensee was meeting the requirements of 10 CFR 20.2206(b) and the Rancho Seco Quality Manual, Appendix A, Section 1.5.2.1.

During 2002, the licensee assigned dosimetry monitoring devices to 321 individuals. The total effective dose equivalent (TEDE) ranged from 0.000 rem to 0.914 rem, which were below the regulatory limit of 5 rems. Dose measurements for shallow dose, lens of the eye dose, internal dose, and extremity dose were all below applicable limits.

Appendix A, Section 1.5.2.2 of the Rancho Seco Quality Manual requires that an annual exposure report for the previous year be submitted to the Commission within the first quarter of each calendar year in accordance with the guidance contained in Section

1.b.(3) of Regulatory Guide 1.16, Reporting of Operating Information. The licensee submitted its annual exposure report for 2002 on March 13, 2003. The sum of the total effective dose equivalent for all individuals who were issued dosimetry was 27.896 rem. The inspector determined that the report was timely and met the applicable requirements.

The inspector inquired from the licensee staff if any plant area had become unusable as a result of any operational occurrences. No plant areas had become unusable as a result of operational occurrences.

c. Conclusions

The licensee was maintaining an effective program to monitor occupational radiation exposures. Occupational exposures for calendar year 2002 were below regulatory limits.

4 Effluent and Environmental Monitoring (84750)

4.1 Audits and Surveillances

a. Inspection Scope

The inspectors reviewed audit and surveillance reports, conducted in 2002 and 2003 as of the time of the inspection, that related to the effluent and environmental monitoring program. These reports were reviewed to determine implementation of the commitments made in the Section XVIII, Audits, of the Rancho Seco Quality Manual. The inspectors also reviewed qualification records for individuals involved in the audit or surveillances.

b. Observations and Findings

The inspectors confirmed that the audit and surveillances were conducted per the commitments made in the Rancho Seco Quality Manual. The licensee had procedures that implement the audit program, and audit plans identified the scope and requirements of activities audited. The individuals that conducted the audit and surveillances were independent of radiation protection management. The audit included an approved check list. Audit team personnel were qualified and authorized to perform the audits or surveillances in the areas audited. The audits and assessments were conducted in a timely manner and were overall of very good quality.

c. Conclusions

The audit and assessments of the effluent and environmental monitoring program were performance based, and their overall quality was very good.

4.2 Changes in the Offsite Dose Calculations Manual.

a. Inspection Scope

The inspectors discussed the changes to the Offsite Dose Calculations Manual with the radiation protection/ chemistry supervisor and reviewed current Offsite Dose Calculations Manual and the Annual Radiological Environmental Operating Report in preparation.

b. Observations and Findings

On August 26, 2002, the licensee completed the relocation of their spent fuel from the fuel handling building to the ISFSI. The risks present in the plant were substantially diminished. The NRC issued revised technical specifications and the licensee accordingly modified many of their procedures. One of the procedures revised was the Offsite Dose Calculations Manual. A significant part of the revision was the removal of the airborne (gaseous) effluent pathway from the effluent program. The licensee evaluation concluded that with the relocation of the spent fuel no airborne effluent pathway was present from the auxiliary or reactor buildings release points.

c. Conclusions

As a result of removal of all spent fuel from the auxiliary, reactor, and fuel handling buildings, the licensee had appropriately revised its offsite dose calculation manual to remove the gaseous effluent pathway.

4.3 Process and Effluent Radiation Monitors

a. Inspection Scope

The inspectors toured the locations of the effluent radiation monitors and discussed the monitors with cognizant licensee staff.

b. Observations and Findings

On April 10, 2003, the inspector observed that the liquid effluent monitor R15017A was operational. This monitor was located in an enclosure protected from the elements. Records reviewed by the inspector indicated that this monitor had last been calibrated on May 7, 2002. The calibration record further indicated that the instrument as found was within calibration.

On April 10, 2003, the inspectors observed that the auxiliary building and reactor building gaseous effluent monitors, R15045 and R15044, respectively, were no longer operational, but two Redeco™ AVS 28A air samplers were operational and stickers indicated in calibration. As noted in Section 4.2 above, the licensee was no longer required to monitor the gaseous effluent pathway. The radiation protection/chemistry superintendent and other senior members of the licensee staff explained that since the

auxiliary and reactor building ventilation was still operable the licensee had decided to continue sampling the air particulate effluents even if not required. The licensee staff stated that no particulate releases had been observed since the change of the Offsite Dose Calculations Manual.

c. Conclusions

The required liquid effluent monitor was operational and in calibration. Although no longer required the licensee was continuing to monitor air particulate effluents from the auxiliary and reactor buildings.

4.4 Annual Radiological Environmental Operating Report

a. Inspection Scope

The inspector reviewed the 2001 Annual Radiological Environmental Operating Report and the 2002 Annual Radiological Environmental Operating Report that was in preparation and discussed these reports with the radiation protection/chemistry supervisor.

b. Observations and Findings

Step 1.5.2.3 of Appendix A to the Rancho Seco Quality Manual requires that the Annual Radiological Environmental Operating Report covering the previous year be submitted before May 1 of each year. On April 23, 2002, the licensee submitted the 2001 Annual Radiological Environmental Operating Report to NRC. On April 22, 2003, subsequent to the site visit, the licensee submitted the 2002 Annual Radiological Environmental Operating Report to NRC. These reports indicated that atmospheric, terrestrial and aquatic environments and the land use adjacent to Rancho Seco Nuclear Station were monitored. Radioactivity levels in the sampled media were consistent with previous evaluations and either not detectable or a small fraction of the applicable limits.

c. Conclusions

The Annual Radiological Environmental Operating Reports for calendar years 2001 and 2002 were submitted on a timely basis and were consistent with the Offsite Dose Calculations Manual, the radiological environmental monitoring program manual, and Sections IV.B.2, IV.B.3, and IV.C of Appendix I, 10 CFR 50. The observed potential radiological impacts were either not detectable or a small fraction of the applicable limits.

4.5 Annual Radioactive Effluent Release Report for 2002

a. Inspection Scope

The inspectors reviewed the 2002 Annual Radioactive Effluent Release Report and discussed it with the radiation protection/chemistry supervisor.

b. Observations and Findings

Step 1.5.3 of Appendix A to the Rancho Seco Quality Manual requires that Annual Radioactive Effluent Release Report covering the previous 12 months be submitted within 90 days of January 1 of each year. On March 24, 2003, the licensee submitted the 2002 Annual Radioactive Effluent Release Report on a timely basis. The report included summaries of radioactive liquid releases from the regenerant holdup tanks and from the retention basins. The regenerant holdup tanks contents were released to the retention basins and the retention basins were discharged offsite. All calculations required by 10 CFR Part 50 were based on the retention basin discharges. In 2002, there were 34 regenerant holdup tanks batch releases and 38 retention basin discharges.

There was one unplanned liquid release that occurred on February 12, 2002. Approximately 420 gallons of radioactively contaminated water were lost from regenerant holdup tank "B" when the tank's agitator shaft seal failed. Some of the water entered the plant storm drain system. The licensee calculated that the maximum organ dose associated with this unplanned release was 3.66E-6 millirem to the a child/bone and the total effective dose equivalent was 1.78E-6 millirem to an adult.

The annual calculated total effective dose commitment due to liquid effluents was 2.38E-01 millirem or approximately 7.93 percent of the applicable limit. The maximum calculated annual organ dose commitment was 3.72E-01 millirem mostly to the child bone or approximately 3.72 percent of the applicable limit.

There were no fission or activation gases nor particulate airborne releases. The annual calculated dose at the site boundary due to tritium was 1.11E-01 millirem which is 0.7 percent of the applicable limit.

In 2002, there were 71 shipments of solid waste made. Sixty-nine solid waste shipments were transported by highway and two transported by rail. All but one of the shipments went to a licensed low level radioactive waste disposal facility. One shipment went to a licensed material recovery facility. Based on the information provided, the inspectors calculated that the total volume of waste shipped was 1213.1 m³ with a total activity of 64.8 curies.

The report concluded that the releases of radioactivity in gaseous and liquid effluents did not exceed the limits of 10 CFR 20 or the numerical guidelines of 10 CFR 50, Appendix I.

c. Conclusions

The 2002 Annual Radioactive Effluent Release Report was submitted on a timely basis, and was consistent with the Offsite Dose Calculations Manual and Process Control Program, and in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I, to 10 CFR Part 50. The report concludes that the releases of radioactivity in gaseous and liquid effluents in 2002 did not exceed the limits of 10 CFR 20 or the numerical guidelines of 10 CFR 50, Appendix I.

5 Followup (92701)

5.1 (Closed) Inspection Followup Item 72-11/0101-02: Transition of Part 50 security program to a Part 72 program

The Part 72 ISFSI physical protection plan specified staffing level and security patrol requirements once all spent fuel was moved to the ISFSI and the Part 50 security program was terminated. The Part 50 security program was a more extensive program than required for the site once the spent fuel was moved to the ISFSI.

During this inspection, the inspectors verified that the licensee maintained staffing and implemented patrols, as required in the Part 72 ISFSI physical protection plan.

5.2 (Closed) Inspection Followup Item 72-11/0101-03: Lighting in areas adjacent to independent spent fuel storage installation

Lighting of the ISFSI protected area and adjacent areas was reviewed. The inspectors determined through a review of the lighting surveys conducted by the licensee that the lighting inside the protected area was sufficient to provide adequate assessment of activities and alarms. However, installation of required lighting in nearby adjacent areas had not been completed. Completion of this activity was not required until after all of the spent fuel was moved to the ISFSI.

During this inspection, the inspectors verified that the licensee had installed lighting in nearby adjacent areas sufficient to provide for adequate assessment by alarm station operators.

5.3 (Closed) Inspection Followup Item 72-11/0101-04: Backup power for security

The licensee demonstrated the availability of backup power for a portion of the security equipment. A backup power supply had not been installed for all systems and components and would not be fully functional until all spent fuel had been moved to the ISFSI.

During this inspection, the inspectors verified that the licensee had included all security loads during a final acceptance test for the security diesel generator. The licensee had significant margin available prior to exceeding the diesel generator rating.

5.4 (Closed) Inspection Followup Item 72-11/0101-05: Security alarm station

The licensee had established a new security alarm station concept to be implemented once all spent fuel was removed from the spent fuel pool and placed in the ISFSI. The current Part 50 onsite security alarm station would not be required at that time and the licensee planned to transfer security alarm activities to the new security alarm station.

During this inspection, the inspectors verified that the licensee had established the new security alarm station, as specified in the Part 72 ISFSI physical protection program.

5.5 (Closed) Inspection Followup Item 72-11/0101-06: Security testing and maintenance program

The licensee had committed in the ISFSI Physical Protection Plan to establish a testing and maintenance program for the security systems. Only portions of this program had been established to support the initial fuel loading activities. Those portions were found to be acceptable.

During this inspection, the inspectors determined that the licensee had established an appropriate maintenance and testing program. The licensee used an administrative procedure to control generation of maintenance work orders. The maintenance personnel used the work instructions and vendor manual guidance to implement any repairs.

5.6 (Closed) Inspection Followup Item 72-11/0101-07: Security records and reporting program

The licensee had committed in the ISFSI physical security plan to maintain certain security records and reports. Records and reporting requirements were currently being performed under the Part 50 security program, and were commensurate with the requirements established in the ISFSI physical security plan. This would continue until all spent fuel was moved to the ISFSI and the Part 50 security program was replaced with the ISFSI physical security program.

During this inspection, the inspectors verified that the licensee maintained the records required by the Part 72 ISFSI physical protection plan and implemented reporting requirements as required.

5.7 (Closed) Inspection Followup Item 50-312/0202-01: Resolution of the Emergency Preparedness issues identified from the March 28, 2002, medical emergency

On March 28, 2002, an individual suffered a fatal heart attack while working in the reactor building. On April 3, 2002, an internal memorandum from the radiation protection/chemistry department to the manager, plant closure and decommissioning discussed a number of areas to be reviewed for possible improvement.

During this inspection the inspectors reviewed commitment tracking system (CMT) Report 53341 and the associated attachments. The licensee had reviewed and taken action on each of the recommendations made by the emergency preparedness specialist. All generated actions items had been completed.

5.8 (Closed) Inspection Followup Item 72-11/0202-01: Resolution of the apparent inconsistency between management expectations for certain surveys performed during ISFSI loading and what the field staff performed

During a previous inspection, the inspector noted that verification that doses at 3 feet from the surface of the horizontal storage modules after each module load were less

than or equal to 400 millirem had not performed at the locations of highest contact dose. The licensee agreed to evaluate and correct the data.

During this inspection, the inspectors interviewed the radiation protection/chemistry superintendent and reviewed CMT Report 53387 and the associated attachments. Although not specifically stated in the CMT report, the apparent root cause of the problem was the misunderstanding on the part of the health physics technicians and the quality staff of the intent of this particular survey. The licensee used data collected from other surveys to correct the data sheets. These other surveys that the health physics technicians had conducted demonstrated that the limit for maximum dose at 3 feet from the horizontal storage modules surface had not been exceeded.

- 5.9 (Closed) Inspection Followup Item 72-11/0202-02: Root cause evaluation for the failure to properly update procedure OP-C.39A to include the ISFSI building

During a previous inspection, the inspector noted that the licensee intended to include in procedure OP-C.39A, Loss of PICS (the plant integrated computer system), the hourly fire watch of the ISFSI building if plant integrated computer system was loss. On August 19, 2002, when procedure OP-C.39A had been put into action because of the plant integrated computer system had been disabled to move components from the control room to the secondary alarm station, the ISFSI building was not included in an hourly fire watch, although the ISFSI building was operational.

During this inspection the inspectors reviewed CMT Report 53388 and the associated attachments. Although not specifically stated in the CMT report, the apparent root cause of the problem was a human error on the part of the individual that last revised the procedure. The licensee had taken corrective actions to revise the procedure and had instituted hourly fire watch when needed.

6 Exit Meeting Summary

The inspectors presented the preliminary inspection results to members of licensee management and staff at the exit meeting on April 10, 2003. Subsequent to the site visit, the principal inspector conducted a telephonic exit interview with the plant manager on May 6, 2003, to discuss the unresolved item identified in Section 2.1.3. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Sacramento Municipal Utility District

M. Bua, Radiation Protection/Chemistry Superintendent
J. Delezenski, Quality Assurance/Licensing/Administration/Training Superintendent
R. Fraser, Principal Instrument and Control Engineer
J. Field, Engineering Superintendent
D. Gardner, Decommissioning Project Manager
R. Jones, Licensing Engineer
D. Koontz, ISFSI Supervisor
L. Langley, Security Specialist
R. Mannheimer, Sr., Quality Control Engineer
E. Nava, Asset Protection
S. Nicolls Radiation Protection/Chemistry/Regulatory/Decommissioning Supervisor
S. Porterfield, Supervisor Radiation Engineering Specialist
O. Quiam, Security Shift Supervisor
S. Redeker, Manager, Plant Closure and Decommissioning
G. Roberts, Maintenance Superintendent
D. Schelosky, Security Shift Supervisor
M. Snyder, Radioactive Waste Superintendent
T. Soule, Asset Protection - Security Specialist

INSPECTION PROCEDURES USED

IP 71801	Decommissioning Performance and Status Review
IP 81001	Physical Security Assessment
IP 83750	Occupational Radiation Exposure
IP 84750	Effluent and Environmental Monitoring
IP 92701	Followup

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

72-11/0301-01	URI	Interior of the primary alarm station visible from the visitor's window
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Closed

72-11/0101-02	IFI	Transition of Part 50 security program to a Part 72 program
72-11/0101-03	IFI	Lighting in areas adjacent to independent spent fuel storage installation
72-11/0101-04	IFI	Backup power for security
72-11/0101-05	IFI	Security alarm station
72-11/0101-06	IFI	Security testing and maintenance program
72-11/0101-07	IFI	Security records and reporting program

50-312/0202-01	IFI	Resolution of the Emergency Preparedness issues identified from the March 28, 2002 medical emergency
72-11/0202-01	IFI	Resolution of the apparent inconsistency between management expectations for certain surveys performed during ISFSI loading and what the field staff performed
72-11/0202-02	IFI	Root cause evaluation for the failure to properly update procedure OP-C.39A to include the ISFSI building

Discussed

None

LIST OF ACRONYMS

AREOR	Annual Radiological Environmental Operating Report
ARERR	Annual Radioactive Effluent Release Report
CMT	Commitment Tracking System
HSM	Horizontal Storage Modules
IFI	Inspection Followup Item
ISFSI	Independent Spent Fuel Storage Installation
IP	Inspection Procedure
LLEA	Local Law Enforcement Agency
ODCM	Offsite Dose Calculation Manual
OSL	Optically Stimulated Luminescence
PAS	Primary Alarm Station
PDQ	Potential Deviation from Quality
PICS	Plant Integrated Computer System
PSP	Physical Security Plan
QA	Quality Assurance
RCA	Radiologically Controlled Area
REMP	Radiological Environmental Monitoring Program
RG	Regulatory Guide
RHUT	Regenerant Holdup Tanks
RP	Radiation Protection
RSAP	Rancho Seco Administrative Procedure
RSQM	Rancho Seco Quality Manual
SAS	Secondary Alarm Station
SMUD	Sacramento Municipal Utility District
TEDE	Total Effective Dose Equivalent
UPS	Uninterruptible Power Supply
URI	Unresolved Item

ATTACHMENT 2

PARTIAL LIST OF DOCUMENTS REVIEWED

Audits and Surveillance Reports

- Rancho Seco Audit Report No. 02-A-005, dated July 23, 2002, Subject Areas Radiological Environmental Monitoring Program (REMP) and QA Program, conducted May 23 - July 18, 2002.
- Rancho Seco Audit Report No. 02-A-007, dated August 28, 2002, Subject Areas: ALARA and Radiological Safety and Control Programs, conducted May 28 - June 6, 2002.
- Surveillance Report No. 02-S-016, approved March 5, 2002, Subject: Radiological Protection Program as it relates to decommissioning activities and the surrounding plants grounds, conducted February 25-26, 2002.
- Surveillance Report No. 02-S-049, approved May 29, 2002, Subject: Radiological Protection Program activities in the Reactor Building at the +20, +40 and +60 elevations related to instrument calibration, RP frisking activities, establishing and maintaining contamination control points, signs and postings, radiological characterization, ALARA techniques, radioactive waste management and industrial safety, conducted May 21, 2002.
- Surveillance Report No. 02-S-054, approved July 9, 2002, Subject: Radiological Protection Program activities in the Auxiliary Building and around the related to instrument calibration, RP frisking activities, establishing and maintaining contamination control points, signs and postings, radiological characterization, ALARA techniques, radioactive waste management and industrial safety, conducted June 5-6, 2002.
- Surveillance Report No. 03-S-003, approved February 15, 2003, Subject: Verify the accuracy of the Rancho Seco 2003 Waste Stream Evaluation, conducted January 28-29, 2003.
- Surveillance Report No. 03-S-005, approved February 5, 2003, Subject: Verify the ALARA committee review function is addressed in procedure and is routinely performed, conducted February 5, 2003.
- Surveillance Report No. 03-S-020, approved March 26, 2003, Subject: Verify the contamination issues documented in Radiation Protection Occurrence (RPO) Report No. 2003-002 have been resolved in accordance with RP.305.36, conducted March 19-20, 2003.
- Selected Auditor/Surveillant Qualification Records.

Memorandums to File

- RCP 02-045, From Steve Porterfield to File, Subject: Monitoring Badge/Dosimeter Reading Difference Evaluation, dated November 13, 2002.

- RCP 03-007, From Steve Porterfield to File, Subject: Third Quarter 2002 Dose Evaluation Follow-up, dated February 12, 2003.

Reports

- Letter MPC&D 02-051 dated April 23, 2002, from Manager, Plant Closure & Decommissioning to USNRC, Attention: E. W. Merschoff. Subject: 2001 Annual Radiological Environmental Operating Report.
- Letter MPC&D 03-036 dated March 24, 2003, from Manager, Plant Closure & Decommissioning to USNRC Document Control Desk, Attention John Hickman. Subject: 2002 Annual Radioactive Effluent Release Report.
- Letter MPC&D 03-051 dated April 22, 2003, from Manager, Plant Closure & Decommissioning to USNRC, Attention: E. W. Merschoff. Subject: 2002 Annual Radiological Environmental Operating Report.
- Letter NQA 03-017, From Jerry Delezenski, Quality Assurance/Licensing/ Administration/Training Superintendent, to REIRS Project Manager, USNRC, Subject: Regulatory Guide 1.16 Annual Exposure Report
- Letter NQA 03-023, From Jerry Delezenski, Quality Assurance/Licensing/ Administration/Training Superintendent, to REIRS Project Manager, USNRC, Subject: 10 CFR 20.2206 Annual Report of Individual Monitoring, dated April 3, 2003.

Procedures and Data Sheets

- Radiation Protection Manual RP.305.22, Departmental Training and Qualification, Revision 3, effective January 15, 1998.
- Radiation Protection Manual RP.305.09, Contaminations Limits and Plant Control for Plant Surface, Revision 7, effective August 15, 2002.
- Dosimetry Manual RP.312.1.13, Abnormal Dosimetry Reports, Revision 3, effective September 29, 2000.

Potential Deviation from Quality Forms and Commitment Tracking System Reports

- PDQ # 03-0007, Fixed contamination found on SFP rack export container free released by Envirocare, opened March 12, 2003.
- CMT report 53341, Review of the Medical Emergency on March 28, 2002, and the associated attachments.
- CMT report 53387, DFC-001 Contains Incorrect Data, and the associated attachments.
- CMT report 53388, ISFSI Fire Protection, and the associated attachments.

Security Related Documents

- Rancho Seco Physical Security Plan, Amendment 1, dated August 29, 2002.
- Rancho Seco ISFSI Training and Qualification Plan, Revision 0, dated February 1, 2000.
- Surveillance Procedure, Eighteen Month Interval ISFSI Security System Test, Number Sp.534, dated April 18, 2001.
- Security Plan Implementing Procedure 001, Alarm Assessment Response, Revision 0, dated December 1, 2000.
- Security Plan Implementing Procedure 002, Security Lock and Key System, Revision 0, dated December 1, 2000.
- Security Plan Implementing Procedure 003, Access Control Program, Revision 0, dated December 1, 2000.
- Security Plan Implementing Procedure 004, Security Records Maintenance, Revision 0, dated December 1, 2000.
- Security Plan Implementing Procedure 005, Security Equipment Operational Testing, Revision 0, dated March 1, 2000.
- Security Plan Implementing Procedure 006, Communications, Revision 0, dated December 1, 2000.
- Security Plan Implementing Procedure 007, Watchman (SAS Operators) Duties, Revision 0, dated December 1, 2000.
- SMUD Letter, EMC Alarm Station Man-Trap Visual Protection, dated April 10, 2003.
- SMUD Letter, Response to Primary Alarm Station Allegation, dated March 20, 2003.
- SMUD Letter, Jump Test of ISFSI Microwave System, dated November 15, 2001.
- PAN LAM Document on the Bullet-resisting Glass, Document No. 118, dated May 11, 1987.
- Drawing on Primary Alarm Station Door, No.2063-64, Sheet 5, Submittal No. 103, dated April 30, 1987.
- Construction Project Drawings #3, F-102-1005, F-102-1006, F-102-1007, F-102-1036, and F-102-2008, dated December 31, 1986 and several other drawing related to the Security Window and the security access doors.
- Rancho Seco Work Order, ISFSI Security Zone 1, dated April 10, 2003.

- Rancho Seco Terrorist Threat Guidance, dated January 10, 2002.
- Rancho Seco Terrorism Response Guidance, dated March 13, 2003.
- Rancho Seco Terrorism Coordination Meeting, with attendance roster dated November 8, 2001.
- Rancho Seco Terrorism Response Training, Tabletop Scenario with attendance roster, dated November 13, 2001.
- Rancho Seco Terrorism Response Training, Tabletop Scenario with attendance roster, dated November 14, 2001.
- Rancho Seco Emergency Response Organization Training, Tabletop Scenario with attendance roster, dated November 12, November 17, and November 19, 2002.
- Rancho Seco Terrorism Response Training, Tabletop Scenario with attendance roster, dated November 29, 2001.
- Rancho Seco Annual Exercise, dated December 11, 2002.
- Annual Protected Area Key Inventory, dated August 28, 2002 and February 5, 2003.
- Incident Complaint Report, dated January 23, 2003.
- Response to Order For Interim Security Compensatory Measures For the Rancho Seco ISFSI, dated November 4, 2002.
- Security Surveillance Report No. 01-S-109, Revision 1, dated November 5-27, 2002.
- Security Surveillance Report No. 02-S-068, dated July 2-15, 2002.
- Security Surveillance Report No. 02-S-072, dated August 12-19, 2002.
- Security Surveillance Report No. 03-S-006, dated February 3-12, 2003.
- Security Surveillance Report No. 03-S-007, dated February 11-26, 2003.
- Security Surveillance Report No. 03-S-015, dated February 13-24, 2003.