ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-312
License No.:	DPR-54
Report No.:	50-312/97-03
Licensee:	Sacramento Municipal Utility District
Facility:	Rancho Seco Nuclear Generating Station
Location:	Rancho Seco Nuclear Generating Station 14440 Twin Cities Road Herald, California
Dates:	June 3-5, 1997
Inspector:	D. Schaefer, Security Specialist, Plant Support Branch
Approved By:	D. Blair Spitzberg, Chief, Nuclear Materials Inspections and Fuel Cycle/Decommissioning Branch Division of Nuclear Materials Safety
Attachment:	Supplemental Information

EXECUTIVE SUMMARY

Rancho Seco Nuclear Generating Station
NRC Inspection Report 50-312/07-03

This was an announced inspection of the licensee's physical security program. The areas inspected included records and reports, testing and maintenance, protected area barrier and detection aids, assessment aids, alarm station and communication, security system power supply, security program plans and procedures, compensatory measures, protected area access control of personnel and packages, personnel training and qualification, management support, security program audit, and review of previous inspection findings. During this inspection, the reactor was shut down and defueled.

Plant Support

- A very good records and reports program was in place. The security staff was correctly reporting security events (Section 1.1).

- A very good testing and maintenance program was in place. Timely repair of security equipment resulted in a low number of compensatory posting hours for security officers (Section 1.2).

- An effective protected area barrier and detection system were in place that would provide delay and detection of individuals attempting unauthorized entry. Additionally, the protected area barrier and detection system effectively limited access to only authorized personnel (Section 1.3).

- The assessment aids system inside the protected area provided excellent assessment of portal alarms, and produced a very good image on monitors in the security alarm station (Section 1.4).

- A very good alarm station and security radio communication system was maintained. Two pieces of communication equipment were inoperative (Section 1.5).

- Security backup power supply system performed well (Section 1.6).

- Changes to security programs and plans did not decrease the effectiveness of the plans. Implementing procedures met performance requirements in the physical security plans (Section 1.7).

- The compensatory measures program had been effectively implemented. Security personnel were well trained on the program requirements (Section 1.8).

- A very good program for searching personnel and packages entering the protected area had been maintained (Section 1.9).

- A very good security training program had been implemented. Security officers displayed excellent conduct, confidence in their training, and knowledge of the procedural requirements (Section 1.10).

- The security program had been effectively managed by a well trained and highly qualified staff, and was provided strong management support. The morale of the security officers was very good (Section 1.11).

- The annual security audit provided an excellent evaluation of the security program and was determined to be a strength in the overall security program (Section 1.12).

Report Details

1 PHYSICAL SECURITY PROGRAM (81700)

The inspector reviewed elements of the physical security program in order to determine adequacy and compliance with the NRC-approved Rancho Seco Physical Security Plan for Long Term Defueled Condition, Amendment 6, Supplement 1, dated January 15, 1993. Evaluations and determinations were based primarily on observations of activities, review of records, and interviews with personnel. The following paragraphs describe the inspection findings in each of the program areas inspected.

1.1 Records and Reports

a. Inspection Scope

The inspector reviewed safeguards event logs and security incident complaint reports to determine compliance with the requirements of 10 CFR 73.71 and the physical security plan.

b. Observations and Findings

The inspector reviewed the security event logs and the security incident complaint reports from April 1996 to May 1997. There were no events recorded in the event log; there were 76 incident complaint reports recorded. The inspector determined that the licensee conformed to the regulatory requirements regarding the reporting of security events. The security complaint incident reports were organized in numerical sequence and easy to audit. The licensee's records included trending and analysis of the security incident complaints.

c. Conclusions

A very good records and reports program was in place. The security staff was correctly reporting security events.

1.2 Testing and Maintenance

a. Inspection Scope

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

b. Observations and Findings

The inspector determined through interviews with security officers and supervisors and a review of records that repairs to security equipment were completed in a

timely manner. The timely response to repair detection aids, access control equipment, and security door locks resulted in a low number of compensatory postings.

c. Conclusions

A very good testing and maintenance program was in place. Timely repair of security equipment resulted in a low number of compensatory postings.

1.3 Protected Area Barrier and Detection Aids

a. Inspection Scope

The inspector reviewed the licensee's protected area barriers and detection aids to determine compliance with the requirements of the physical security plan. (Note: The licensee had no vital areas or vital equipment as defined in 10 CFR 73.2.)

b. Observations and Findings

The inspector determined through observation that the protected area (the Fuel Storage Building) was appropriately locked and alarmed and that the protected area barriers were adequate to ensure delay of a potential adversary, and to ensure that unescorted access was limited to authorized personnel. The alarm system consisted of balanced magnetic switches at the entry points to the protected area and infrared and microwave detection aids inside the protected area. The alarms annunciated in a continuously manned alarm station. The inspector verified through testing that an alarm for each component annunciated in the alarm station. The protected area door locking mechanisms and alarms were properly tested. Emergency exits from the protected area were locked and alarmed.

The inspector conducted a review of the lock and key inventory records and keys in storage and verified that security related locks and keys for the protected area barrier were controlled in accordance with commitments in the physical security plan.

c. Conclusions

An effective protected area barrier and detection system 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.

1.4 Assessment Aids

a. Inspection Scope

The inspector reviewed the assessment aids to determine compliance with the physical security plan. The areas inspected included the closed-circuit television monitors located in the alarm station.

b. Observations and Findings

The inspector verified through observation that a closed circuit television system was installed inside the protected area and that the closed circuit television cameras were positioned to provide assessment of the protected area portal alarms. Following an alarm, each closed circuit television camera produced a very good image on a monitor in the security alarm station.

c. Conclusions

The assessment aids system inside the protected area provided excellent assessment of portal alarms and produced a very good image on monitors in the security alarm station.

1.5 Alarm Stations and Communications

a. Inspection Scope

The inspector reviewed the communication capabilities to determine compliance with the requirements of the physical security plan. The areas inspected included the operability of radio and telephone systems and the capability to effectively communicate with the local law enforcement agencies through both of the systems.

b. Observations and Findings

The inspector determined through observations and interviews that the security alarm station, located in the control room, was equipped with appropriate alarm, surveillance, and communication capability. The alarm station was continually manned by a Control Room Operator/Alarm Station Operator whose duties did not interfere with the execution of assessment and response functions. The inspector determined that the Control Room Operator/Alarm Station Operator was capable of maintaining continuous communication with each security officer on duty and was also capable of calling for assistance from the local law enforcement authority. The licensee maintained an adequate number of portable radios for use by members of the security organization. Radio checks with the local law enforcement authority were conducted at least once each 24 hours.

During this inspection, while in compliance with the physical security plan, the licensee's ring-down telephone to the Sheriff's Office and one of the security department's radio channels were temporarily inoperative. The licensee utilized alternate means of communication to meet physical security plan requirements.

c. Conclusions

A good alarm station and a security radio communication system were maintained. Two pieces of communication equipment were inoperative.

1.6 Security System Power Supply

a. Inspection Scope

The inspector reviewed the security system power supply to determine compliance with the physical security plan.

b. Observations and Findings

The physical security plan requires that sufficient backup power for a specific period of time be provided to the security computer, alarm system, and the radio communications system. The licensee provided this backup power through multiple uninterruptible power supply systems. During this inspection, the licensee tested the backup power for the security computer and the alarm system as discussed in paragraph 2.1 below. The systems performed as required under the security backup power supply system.

c. Conclusion

The security backup power supply system performed well.

1.7 Security Program Plans and Procedures

a. Inspection Scope

The inspector reviewed the physical security plan and the implementing procedures to determine compliance with the requirements of 10 CFR 50.54(p) and the physical security plan.

b. Observations and Findings

The inspector determined through interviews and observations that security, contingency, and training and qualifications plan changes did not decrease the effectiveness of the respective plans. The latest NRC-approved plans included: (1) Rancho Seco Physical Security Plan for Long Term Defueled Conditions, Amendment 6, Supplement 1; and (2) Rancho Seco Security Training and

Qualification Plan for Long Term Defueled Condition, Revision 3. Both plans were dated January 15, 1993.

The inspector verified that the licensee had an effective management system for the development and administration of procedures and that changes to the procedures did not reduce the effectiveness of the licensee's security program.

c. Conclusions

Changes to security programs and plans did not decrease the effectiveness of the plans. Implementing procedures met performance requirements in the physical security plans.

1.8 Compensatory Measures

a. Inspection Scope

The inspector reviewed the licensee's compensatory measures program to determine compliance with the requirements of the physical security plan. The areas inspected included deployment of compensatory measures and the effectiveness of those measures.

b. Observations and Findings

The inspector confirmed that the licensee deploys compensatory measures in a manner that adequately compensates for any degraded security system. The inspector determined through interviews of security officers that the officers scheduled to be assigned to compensatory posts were adequately trained for those duties.

c. Conclusions

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

1.9 Protected Area Access Control of Personnel and Packages

a. Inspection Scope

The inspector reviewed the access control program for personnel and packages into the protected area to determine compliance with the physical security plan. (Note: It is not possible for vehicles to enter the protected area.)

b. Observations and Findings

Upon entering the industrial area, persons were issued a photo-identification security key card which authorized access, as appropriate, to the industrial area and the protected area. Persons not authorized a key card were escorted at all times within the industrial and protected areas. Prior to leaving the industrial area, all persons left their key card with the attending security officer.

The inspector determined through observations that personnel access to the protected area was effectively controlled. The inspector verified that the licensee had a search program as committed to in the physical security plan for firearms, explosives, incendiary devices, and other unauthorized materials. The fixed metal detector and the explosive detector at Security Door FB-308 were inspected and found to be functional and well maintained. The inspector verified that personnel were properly identified and authorization was verified prior to the security officer unlocking Security Door FB-308 and providing access to the protected area. The inspector verified that the licensee maintained escort procedures for visitors authorized access into the protected area.

In addition to the protected area at the Spent Fuel Building, the licensee also maintained "security areas" throughout portions of the Turbine Building (industrial area). Security areas included the control room (housing the security alarm console), and the communications room (housing the two security computers). Personnel utilized their photo identification key card to access these security areas.

The inspector reviewed background investigation screening files for three individuals authorized access to the industrial and protected areas. The licensee had contracted with Wackenhut Incorporated to complete the required background investigations. All screening files were accurate and complete.

As an initiative, the licensee continued to submit the fingerprints for all persons requesting unescorted protected area access, to the California Department of Justice. The principle advantage of this system, is that once an employer (such as the licensee) registers a person with California Department of Justice, the employer will be notified of any future reported criminal activities involving this person. (Note: In accordance with 10 CFR 73.56, the licensee also submitted fingerprints through the NRC to the Federal Bureau of Investigation.)

c. Conclusion

A very good program for searching personnel and packages entering the protected area was maintained.

1.10 Personnel Training and Qualification

a. Inspection Scope

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

b. Observations and Findings

During the inspection, the inspector observed security officers performing their duties. Without exce. ion, the security officers displayed excellent conduct, confidence in their training, and knowledge of the procedural requirements.

The security organization conducted all required training in accordance with its approved security, training, and contingency plans. The inspector confirmed, by a review of the composite security training records, that the required training was conducted every 12 months.

The inspector determined from a review of four training records and interviews with security officers that the licensee had an excellent program to ensure that security officers were trained, equipped, and qualified to perform each assigned security-related task or duty. The records reviewed were maintained current and well organized. The inspector interviewed security officers and confirmed that their annual medical examinations were thorough.

c. Conclusions

A very good security training program was implemented. Security officers displayed excellent conduct, confidence in their training, and knowledge of the procedural requirements.

1.11 Management Support

a. Inspection Scope

The inspector reviewed the effectiveness and adequacy of management support to determine the degree of management support for the physical security program.

b. Observations and Findings

The inspector determined through observations and from discussions with security force personnel that licensee management was appropriately managing the security program, was well informed about security program requirements, and provided strong support for the program. Further, the inspector determined that the security program was managed by a well trained and highly qualified security staff. All

members of the security organization had a clear understanding of their duties and responsibilities, and the morale of the security officers was very good.

c. Conclusions

The security program was effectively managed by a well trained and highly qualified staff and was provided strong management support. The morale of the security officers was very good.

1.12 Security Program Audit

a. Inspection Scope

The inspector reviewed the annual audit of the NRC-approved physical security program to determine compliance with the physical security plan, contingency plan, and training and qualifications plan.

b. Observations and Findings

The inspector reviewed Audit Report 96-A-015, dated December 24, 1996, which documented the licensee's audit of the Rancho Seco Security Program and the effectiveness of program implementation. This audit was conducted during the period December 9-18, 1996, and concluded that the Ranch Seco Security Program was appropriate for a defueled plant and was effectively implemented in accordance with the permanently defueled technical specifications and the physical security plan. Additionally, the inspector determined through a review of records that the audit team was independent of plant security management and plant security management supervision and that the audit results were reported to the appropriate level of management. The inspector determined that the audit report was a program strength.

c. Conclusions

The annual security audit provided an excellent evaluation of the security program and was determined to be a strength in the overall security program.

2 FOLLOWUP (92904)

2.1 (Closed) Inspection Followup Item 312/S602-01: Uninterruptible Power Supply System

During a previous security inspection the licensee had recently completed an upgrade to the uninterruptible power supply system; however, final testing of the upgraded equipment had not been completed. Additionally, the licensee had not developed a procedure for testing this equipment and was unable to demonstrate the capability of the uninterruptible power supply system.

During this inspection, the inspector reviewed the licensee's procedure for testing the uninterruptible power supply system and also observed the licensee conduct a test of this system. The licensee's test of this system demonstrated the ability of security equipment to satisfactorily operate on backup power.

3 EXIT MEETING

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on June 5, 1997. The licensee acknowledged the findings presented.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Duperron, Supervisor, Security Operations
J. Field, Superintendent, Technical Services
H. Humphrey, Supervisor, I&C Maintenance
W. Koepke, Supervisor, Quality Control
S. Redeker, Manager
T. Robinson, Supervisor, I&C
T. Tucker, Superintendent, Operations
W. Wilson, Supervisor, Radiation Protection/Chemistry

INSPECTION PROCEDURES USED

IP 81700 Physical Security Program for Power Reactors

IP 92904 Followup - Plant Support

LIST OF ITEMS OPENED CLOSED AND DISCUSSED

Items Closed

50-313/9602-01 IFI Uninterruptible Power Supply System

LIST OF DOCUMENTS REVIEWED

Security Event Logs and Incident Complaint Reports from April 1996 to May 1997

Plant Maintenance Manual Procedure, I.408, Revision 26, "Security Door Card Readers and Alarms"

Rancho Seco Audit Report No. 96-A-015, dated December 24, 1996

Composite list of dates of training and medical examination