

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 50-312
License No.: DPR-54
Report No.: 50-312/99-02
Licensee: Sacramento Municipal Utility District
Facility: Rancho Seco Nuclear Generating Station
Location: Rancho Seco Nuclear Generating Station
14440 Twin Cities Road
Herald, California
Dates: March 9-11, 1999
Inspector: D. Schaefer, Security Specialist, Plant Support Branch
Approved By: D. Blair Spitzberg, Ph.D., Chief,
Fuel Cycle and Decommissioning Branch
Attachment Supplemental Information

EXECUTIVE SUMMARY

Rancho Seco Nuclear Generating Station NRC Inspection Report 50-312/99-02

This was an announced inspection of the licensee's physical security program. The areas inspected included access authorization, alarm station and communications, access control of personnel and packages, testing and maintenance, protected area barriers and detection aids, assessment aids, compensatory measures, security system power supply, security program plans and procedures, security event log, personnel training and qualification, management support, staffing levels, and security program audit. During this inspection, the reactor was shut down and defueled.

Plant Support

- Performance in the physical security area was good. An effective alarm station and security radio communication system were maintained. A good program for searching personnel and packages entering the protected area was maintained. The testing and maintenance of security equipment were completed in a timely manner. An effective protected area barrier and detection system were in place that would provide delay and detection to individuals attempting unauthorized entry. Assessment aids provided good assessment of portal alarms and produced a clear image on monitors in the security alarm station. The compensatory measures program was effectively implemented. The security backup power supply system performed very well. A good lock and key control program was maintained and implemented. Changes to security programs and plans were reported to the NRC within the required time frame. A properly maintained records and reports program was in place. The security staff was correctly reporting security events. A good training program was implemented. Senior management support for the security organization was good. The security program was implemented by a well trained staff. On-shift security staffing was properly maintained. The annual audit of the security program included observation of performance, and its overall quality was good (Sections S1.2, S1.3, S2.1, S2.2, S2.3, S2.4, S2.5, S2.6, S3.1, S3.2, S5.1, S6.1, S6.2, and S7.1).
- Performance in the access authorization area was very good. An effective access authorization program was established to grant individuals unescorted access to the industrial and the protected areas (Section S1.1).

Report Details

IV. Plant Support

S1 Conduct of Security and Safeguards Activities

S1.1 Access Authorization

a. Inspection Scope (81700)

The Access Authorization Program was inspected to determine compliance with the requirements of 10 CFR 73.56, the security plan, and Regulatory Guide 5.66. The areas inspected included the review of six background investigation files for individuals presently granted unescorted access. The inspector reviewed records and conducted interviews to determine the adequacy of the program. The inspector also reviewed information concerning the licensee's verification of identify, employment history, educational history, credit history, criminal history, military service, and the character and reputation of the applicants before granting individuals unescorted access to protected and vital areas.

b. Observations and Findings

Background investigation screening files were complete and thorough. 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 the California Department of Justice, the employer will be notified of any future reported criminal activities involving this person. In accordance with 10 CFR 73.56, the licensee also submitted fingerprints through the NRC to the Federal Bureau of Investigation.

c. Conclusions

Performance in the access authorization area was very good. An effective access authorization program was established to grant individuals unescorted access to the industrial and the protected areas. The access authorization program included the submission of fingerprints to the state of California, Department of Justice.

S1.2 Alarm station and Communications

a. Inspection Scope (81700)

The alarm station and the 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 alarm station, systems security, operability of the radio and the telephone systems, and the capability to effectively communicate with the local law enforcement agencies through both of the systems.

b. Observations and Findings

Through observations and interviews, the inspector determined 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 operators/alarm station operators were alert and well trained and were 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.

c. Conclusions

An effective alarm station and security radio communication system were maintained. Alarm station operators were alert and well trained. An adequate number of portable radios were available for members of the security organization.

S1.3 Protected Area Access Control of Personnel and Packages

a. Inspection Scope (81700-02.01)

The access control program for personnel, packages, and vehicles was inspected to determine compliance with the requirements of the security plan. (Note: It is not possible for vehicles to enter the protected area.)

b. Observations and Findings

Through observations and interviews, the inspector determined that 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.

Additionally, through observations, the inspector determined 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 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 operational.

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). Authorized personnel utilized their photo identification key card to access these security areas.

c. Conclusions

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

S2 Status of Security Facilities and Equipment

S2.1 Testing and Maintenance

a. Inspection Scope (81700)

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

b. Observations and Findings

Through interviews with security officers and supervisors, the inspector determined that repairs to security equipment were generally completed in a timely manner. On March 9, 1999, the inspector observed a member of the security staff perform functional testing of several door alarms. All equipment performed as designed.

c. Conclusions

The testing and maintenance of security equipment were completed in a timely manner.

S2.2 Protected Area Barrier and Detection Aids

a. Inspection Scope

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

b. Observations and Findings

Through observations, the inspector determined 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 protected area door locking mechanisms and alarms were properly tested. Emergency exits from the protected area were locked and alarmed.

c. Conclusion

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.

S2.3 Assessment Aids

a. Inspection Scope (81700)

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

b. Observations and Findings

The inspector observed the assessment aids and determined that the system was effective. The inspector verified through observation 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 clear image on a monitor in the security alarm station. Through interviews, the inspector determined that prompt maintenance support was provided to ensure the system; problems were corrected in a timely manner.

c. Conclusions

Assessment aids provided good assessment of portal alarms and produced a clear image on monitors in the security alarm station.

S2.4 Compensatory Measures

a. Inspection Scope (81700)

The compensatory measures were inspected 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 consistent with the requirements in the physical security plan. Through interviews, the inspector 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 personnel were well trained on program requirements.

S2.5 Security System Power Supply

a. Inspection Scope (81700)

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

b. Observations and Findings

The 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 two separate uninterruptible power supply systems. During the inspection, the licensee conducted its periodic load testing of both of these systems. Both systems performed as designed.

c. Conclusions

The security backup power supply system performed very well.

S2.6 Security Locks, Keys and Combinations

a. Inspection Scope (81700)

The locks, keys, and combinations program was inspected to determine compliance with the physical security plan.

b. Observations and Findings

Through a review of lock and key procedures and records, the inspector determined that inventories were completed as required. The records indicated that the locks and keys were rotated or changed when employees who had access to security locks and keys were terminated. Security of the additional sets of lock cores and keys was effective in preventing compromise. Records of keys, locks, core sets, and all changes were being maintained.

c. Conclusion

A good lock and key control program was maintained and implemented.

S3 Security and Safeguards Procedures and Documentation

S3.1 Security Program Plans and Procedures

a. Inspection Scope (81700)

The licensee's physical security plan for Long-Term Defueled Condition, Amendment 7, dated March 28, 1998, and implementing procedures were reviewed to determine compliance with the requirements of 10 CFR 50.54(p), 10 CFR 50.90, and 10 CFR 73.55(b)(3).

b. Observations and Findings

The inspector determined from a review of security plans and procedures and interviews with licensee security personnel that previous plan changes were reported to the NRC within the required time frame and changes submitted did not reduce the effectiveness of the plan. The inspector determined that the licensee maintained an effective management system for the development and administration of procedures and verified that changes to the procedures did not reduce the effectiveness of the licensee's security program.

c. Conclusions

Changes to security programs and plans were reported to the NRC within the required time frame. Overall, implementing procedures met the performance requirements in the physical security plan.

S3.2 Security Event Logs

a. Inspection Scope (81700)

The inspector reviewed safeguards event logs and security incident reports to determine compliance with the requirements of 10 CFR 73.21(b) and (c), and the physical security plan. The inspector reviewed the safeguards event logs from May 1998 to February 1999.

b. Observations and Findings

The inspector determined that the licensee conformed to the regulatory requirements regarding the reporting of security events. The necessary records were available for review and maintained for the time required by regulations. There were no events recorded in the event logs.

c. Conclusions

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

S5 Security and Safeguards Staff Training and Qualification

S5.1 Personnel Training and Qualification

a. Inspection Scope (81700)

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

The inspector observed security officers during the performance of their duties. Observed security officers demonstrated good knowledge of the procedural requirements for the task they were performing.

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.

From a limited review of three training records, the inspector determined that the licensee had a good program to ensure that security officers were trained, equipped, and qualified to perform each assigned security-related duty. The records reviewed were maintained current and well organized. The inspector interviewed security officers and confirmed that the annual medical examinations were thorough.

c. Conclusions

A good training program was implemented. Security officers demonstrated good knowledge of the procedural requirements for the task they were performing. Documentation of training activities by the security shifts and training section was good.

S6 Security Organization and Administration

S6.1 Management Support

a. Inspection Scope (81700)

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

b. Observations and Findings

Through observations and discussions with security force personnel, the inspector determined that the security program received good support from senior management as demonstrated by ongoing support for improved equipment and facilities. The inspector determined that the security program was implemented by a trained and

qualified security staff. All members of the security organization had a clear understanding of their duties and responsibilities.

c. Conclusions

Senior management support for the security organization was good. The security program was implemented by a well trained staff.

S6.2 Staffing Levels

a. Inspection Scope (81700)

The inspector verified that the total number of trained security officers and armed personnel immediately available at the facility to fulfill response requirements met the number specified in the physical security plan.

b. Observations and Findings

The inspector determined from discussions with security supervisors and reviewing the security shift personnel rosters that there was an adequate number of security officers always available to meet the number specified in the physical security plan.

c. Conclusion

On-shift security staffing was properly maintained.

S7 Quality Assurance in Security and Safeguards Activities

S7.1 Security Program Audit (81700)

a. Inspection Scope

The inspector reviewed the annual audit of the physical security program to determine compliance with the requirements of 10 CFR 50.54(p), 10 CFR 73.55(g), and the security plan.

b. Observations and Findings

The inspector reviewed Rancho Seco Audit Report 98-A-015 dated December 23, 1998, 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 8-11, 1998, and concluded that the Ranch Seco Security Program was appropriate for a defueled plant. Additionally, the inspector confirmed that members of the audit team were independent of plant security management, that the audit was partially performance based, and that the audit results were reported to the appropriate level of management. The overall quality of the audit was good.

c. Conclusions

The annual audit of the security program included observation of performance and the overall quality was good.

S8 Miscellaneous Security and Safeguards Issues (92700, 92904)

S8.1 (Closed) Violation 50-312/9802-01: Review and Consideration of All Background Investigation Information

During a previous inspection, the inspector determined that the licensee failed to review and consider all (derogatory) information obtained during an individual's background investigation. Licensee management had not reviewed or considered an individual's criminal conviction information contained in fingerprint results, nor considered if the individual had willfully omitted or falsified criminal history information listed on a personnel security questionnaire.

In its June 30, 1998, response to the violation, the licensee acknowledged the violation and stated that it occurred because the office staff had placed the criminal history information in the employee's badge information folder instead of routing the information to the appropriate supervisor for review.

In its response, the licensee also stated that Rancho Seco Administrative Procedure (RSAP) 1003, "Access Screening Requirements," had been revised to clarify security staff responsibility regarding the handling and review of criminal history information. During this inspection, the inspector verified that Revision 10 to RSAP-1003, included this change, and that the security staff had been trained on the responsibilities and expectations regarding the proper handling and review of criminal history information.

Additionally, through a review of recently completed background investigations, the inspector determined that the licensee had reviewed and considered all available information prior to granting employees unescorted access authorization to the protected area.

S8.2 (Closed) Inspection Followup Item 50-312/9802-02: Acquiring "Developed" References

During a previous inspection, the inspector determined that a background investigation file for an individual granted temporary unescorted site access indicated that Wackenhut Company had acquired a "developed" character reference by telephoning ("canvassing") the local union. There was no information in the file indicating why the "developed" reference had not been obtained by telephoning one of the five "listed" references. Information Notice 91-59, "Problems With Access Authorization Programs," dated September 23, 1991, had previously discouraged the practice of telephoning union halls for personal references. The Notice identified that union business agents had previously certified false information to licensees conducting background investigations.

Through a review of recently completed background investigations, the inspector verified that "developed" character references had been obtained by telephoning references listed by the employee.

S8.3 (Closed) Inspection Followup Item 50-312/9802-03: Alarm Station Security Computer Operator's Manual

During a previous inspection, the inspector determined that the licensee's Alarm Station Security Computer Operator's Manual included outdated information on the uninterruptible power supply system and on the operation of equipment for the discontinued perimeter alarm system.

Through a review of the revised Alarm Station Security Computer Operator's Manual, dated November 23, 1998, the inspector determined that the Manual had been updated.

S8.4 Information Notice 98-35: Threat Assessments and Consideration of Heightened Physical Protection Measures

Information Notice 98-35 dated September 4, 1998, was issued to inform licensees of factors considered by the NRC when assessing threats and disseminating that information to the licensees. Additionally, the Notice advised licensees about additional physical protection measures that should be considered for specific threat conditions. The notice discussed threat levels and appropriate response levels in an effort to avoid any future misunderstandings concerning NRC threat advisories and to facilitate an appropriate and comparable level of physical protection response throughout the nuclear industry.

During this inspection, the licensee stated they had recently received the notice and were reviewing it for applicability at Rancho Seco.

V. Management Meetings

X1 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on March 11, 1999. The licensee acknowledged the findings presented. No proprietary information was identified.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

E. Brandt, Security Department, Rancho Seco
J. Delezenski, Superintendent, Quality Assurance, Licensing, and Administration, Rancho Seco
D. Dungey, Manager, General Services, SMUD
W. Koepke, Supervisor, Quality Control,
J. Field, Superintendent, Technical Services, Rancho Seco
L. Langley, Security Specialist, Rancho Seco
K. Miller, Senior Project Manager
E. Nava, Supervisor, District Security Operations/General Services, SMUD
S. Redeker, Plant Manager, Rancho Seco
T. Robinson, Supervisor, I&C, Rancho Seco

INSPECTION PROCEDURES USED

IP 81700	Physical Security Program for Power Reactors
IP 92700	Onsite Followup of Written Reports of Non-Routine Events at Power Reactor Facilities (Information Notice)
IP 92904	Followup - Plant Support

LIST OF ITEMS OPENED CLOSED AND DISCUSSED

Items Open

None

Items Closed

50-312/9802-01	VIO	Review and Consideration of All Background Investigation Information
50-312/9802-02	IFI	Acquiring "Developed" References
50-312/9802-03	IFI	Alarm Station Security Computer Operator's Manual

Items Discussed

IN	Information Notice 98-35: Threat Assessments and Consideration of Heightened Physical Protection Measures
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LIST OF DOCUMENTS REVIEWED

Security Event Logs and Incident Complaint Reports from May 1998 to February 1999

Rancho Seco Audit Report No. 98-A-015 dated December 23, 1998

Rancho Seco Audit Report No. 98-A-015 dated December 30, 1998

Rancho Seco Administrative Procedure RSAP-1003, "Access Screening Requirements,"
Revision 10

Alarm Station Security Computer Operator's Manual, dated November 23, 1998

Composite list of dates of training and medical examination