

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket Nos.: 50-361  
50-362

License Nos.: NPF-10  
NPF-15

Report No.: 50-361/98-15  
50-362/98-15

Licensee: Southern California Edison Co.

Facility: San Onofre Nuclear Generating Station, Units 2 and 3

Location: 5000 S. Pacific Coast Hwy.  
San Clemente, California

Dates: August 24-28, 1998

Inspector: A. Bruce Earnest, Physical Security Specialist

Approved By: Blaine Murray, Chief, Plant Support Branch

Attachment: Supplemental Information

EXECUTIVE SUMMARY

San Onofre Nuclear Generating Station, Units 2 and 3  
NRC Inspection Report 50-361/98-15; 50-362/98-15

This routine, announced inspection focused on the licensee physical security program. The areas inspected included review of access control of personnel, packages, and vehicles, protected area barriers, protected area detection aids, testing and maintenance, and assessment aids.

Plant Support

- Personnel access to the protected area was efficiently controlled (Section S1.1).
- Package and material access to the protected area was efficiently controlled (Section S1.2).
- Vehicle access control to the protected area was efficiently controlled (Section S1.3).
- The protected area physical barriers were adequate to ensure a potential adversary would be delayed in accessing the protected area (Section S2.1).
- Some zones failed during performance tests of protected area detection aids (Section S2.2).
- An efficient and well documented test and maintenance program was implemented (Section S2.3).
- The assessment aids system provided adequate assessment of the perimeter detection zones (Section S2.4).

Report Details

IV. Plant Support

**S1 Conduct of Security and Safeguards Activities**

S1.1 Access Control - Personnel

a. Inspection Scope

The personnel access control program was inspected to determine compliance with the requirements of 10 CFR 73.55(d)(1), (2), (3), (5), (6), and (7), and the physical security plan.

b. Observations and Findings

The inspector observed that personnel access to the protected area was efficiently controlled. The protected area access control equipment was functional and well maintained. The last control area for access to the plant was contained within a bullet resistant enclosure.

The inspector observed numerous tests of the access control metal detectors. The tests properly challenged equipment performance. The security officers manning the access control lanes were knowledgeable of all access control procedural requirements and demonstrated that knowledge when questioned by the inspector.

c. Conclusion

Personnel access to the protected area was effectively controlled.

S1.2 Access Control - Packages

a. Inspection Scope

The package access control program was inspected to determine compliance with the requirements of 10 CFR 73.55 (d)(3) and the physical security plan.

b. Observations and Findings

The inspector observed the searching of packages and materials at the personnel access control points. The package and material search process was effective. Tests documented that the X-ray equipment performed in a proper manner. The security officers operating the equipment appeared to be well-trained and promptly and completely answered all the inspector's questions.

c. Conclusion

Package and material access to the protected area was effectively controlled.

### S2.3 Access Control - Vehicles

#### a. Inspection Scope

The vehicle access control program was inspected to determine compliance with the requirements of 10 CFR 73.55 (d)(4) and the physical security plan.

#### b. Observations and Findings

The inspector observed a search of two trucks outside the vehicle barrier system. The security officer conducted the search in compliance with their procedural requirements. The inspector noted that the security officer conducting the searches was simultaneously conducting training for temporary contract security officers during the search. The security officer was very knowledgeable of the procedural requirements and appeared to give a comprehensive training session.

#### c. Conclusion

Vehicle access control to the protected area was effectively controlled.

## S2 **Status of Security Facilities and Equipment**

### S2.1 Physical Barriers - Protected Area

#### a. Inspection Scope

The protected area physical barriers were inspected to determine compliance with the requirements of 10 CFR 73.2, 73.55(c)(1) through (3) and the physical security plan.

#### b. Observations and Findings

The inspector walked down the protected area physical barriers and determined that the installed barriers would adequately delay penetration of the protected area. Except as noted in the physical security plan, the protected area barriers were separated from vital area barriers by at least 50 feet. Isolation zones were maintained for 20 feet on each side of the protected area barrier or were described in the physical security plan. The isolation zones were free of obstructions that would allow an intruder to hide from assessment by cameras or response personnel. The inspector confirmed that the perimeter barrier was constructed of at least 11-gauge wire and was at least 8-feet high including the top guard.

#### c. Conclusion

The protected area physical barriers were adequate to ensure a potential adversary would be delayed in an attempt to access the protected area.

S2.2 Detection Aids - Protected Area

a. Inspection Scope

The detection aids program for the protected area was inspected to determine compliance with the requirements of 10 CFR 73.55(c)(4), (e)(2) and (3) and the requirements of the physical security plan. The areas inspected included the detection systems' capabilities, zoning of the alarm systems, detection system security, and maintenance of the detection aids system.

b. Observations and Findings

Performance tests were conducted of the protected area microwave, E-field, and infrared detection systems.

On August 27, 1998, tests of the protected area detection system identified two separate protected area detection zones where attempted penetration of the zones was not initially detected. Another zone was inoperable for its entire length (approximately 50 yards). The test results indicated that the alarm system was not maintained operable in those locations. Further, two zones were discovered that were vulnerable to defeat, but tests were not completed due to safety restrictions. The operable condition of the protected area detection aids is an inspection followup item pending further testing of the detection system during a future inspection (50-361;-362/9815-01). The licensee was conducting a root cause analysis to determine the cause of the entire zone failure, and plans were being discussed to remove the vulnerabilities to the two zones identified as vulnerable to defeat. Compensatory measures were immediately posted.

c. Conclusion

Some zones failed during performance testing of protected area detection aids.

S2.3 Testing and Maintenance

a. Inspection Scope

The testing and maintenance programs were inspected to determine compliance with the requirements of 10 CFR 73.55(a), (g)(1) through (3), and the physical security plan.

b. Observations and Findings

The inspector reviewed testing and maintenance records and confirmed that the records required in the physical security plan were on file, well documented, and readily available for review. The licensee provided instrumentation and controls technicians to repair or replace any security equipment that required corrective maintenance. The inspector determined through a review of work records and interviews with security officers and supervisors that repairs were completed in a timely manner with the exception of one protected area camera. The delay in repair of the camera was in excess of 1 month and was attributed to safety concerns. The camera was located on the side of a building that could not be safely reached until a special safety harness was

designed and constructed. A proper quarterly preventive maintenance program was in place for the security systems.

The inspector observed the testing of several security systems during the inspection. The security officers performing the tests were knowledgeable of testing requirements and techniques. The tests observed by the inspector were performed in a proper manner.

c. Conclusion

An effective and well documented test and maintenance program was implemented.

S2.4 Assessment Aids

a. Inspection Scope

The assessment aids program was inspected to determine compliance with 10 CFR 73.55 (h)(4) and (6) and the physical security plan. The areas inspected included the application of closed-circuit television to provide observation of the perimeter isolation zones, adequacy of the monitoring system in the alarm stations, and the effectiveness of the guard towers.

b. Observations and Findings

The inspector observed tests of the closed-circuit television system and determined that it was a adequate system when combined with the manned guard towers. The closed-circuit television cameras were used primarily to enhance guard tower assessment capabilities. The alarm station monitors were positioned to facilitate assessment by operators.

c. Conclusion

The assessment aids system provided adequate assessment of the perimeter detection zones.

## 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 August 28, 1998. The licensee acknowledged the findings presented. No proprietary information was identified.

**ATTACHMENT**

**SUPPLEMENTAL INFORMATION**

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee

R. Krieger, Vice President, Nuclear Generation  
D. Nunn, Vice President, Engineering & Technical Services  
R. Borden, Supervisor, Nuclear Oversight  
G. Broussard, Supervisor, Security Operations  
M. Flannery, Access Authorization Supervisor  
T. Frey, Compliance Coordinator  
G. Gibson, Manager, Compliance  
M. Gratz, Maintenance  
R. Jones, Supervisor, Security Systems  
M. McBreaty, Compliance Engineer  
G. Plumlee, Supervisor, Compliance  
J. Rainsberry, Licensing Manager  
K. Slagle, Manager, Nuclear Oversight  
J. Wallace, Manager, Site Security  
M. Wharton, Manager, Engineering Design

NRC

J. Sloan, Senior Resident Inspector

**INSPECTION PROCEDURES USED**

81700 Physical Security Program for Power Reactors

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

50-361;-362/9815-01 IFI      Protected Area Detection Aids

LIST OF DOCUMENTS REVIEWED

Physical Security Plan, Revision 58

Security Procedure SO123-IV-5.1, Protected and Vital Area Access

Security Procedure SO123-IV-4.4, Security Lock and Key Control.

Access Authorization Procedure SO123-XXIII-4.2, Personnel Screening Programs for Unescorted Access

Access Authorization Procedure SO123-XXIII-4.3, Screening Deficiencies Affecting Unescorted Access and Access to Safeguards Information

Security System Maintenance Work Requests, 1998