U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No:	50-261
License No:	DPR-23
Report No:	50-261/96-13
Licensee:	Carolina Power & Light Company
Facility:	H. B. Robinson Unit 1
Location:	2112 Old Camden Rd. Hartsville, SC 29550
Dates:	November 4-8, 1996
Inspector:	D. H. Thompson, Safeguards Inspector
Approved by:	P. Fredrickson, Chief, Special Inspection Branch Division of Reactor Safety

ENCLOSURE 2

EXECUTIVE SUMMARY

H. B. Robinson Power Plant, Unit 1
NRC Inspection Report 50-261/96-13

This routine announced inspection was conducted in the area of plant support by a regional safeguards specialist. The specific area evaluated was the Physical Security Program for Power Reactors.

- The inspector determined that the licensee employed compensatory measures when security equipment has failed or its performance has been impaired. The inspector also noted that the compensatory measures that were employed did not reduce the effectiveness of the security system that existed prior to the failure. Section (S.1.1).

- Through observations, interviews, and documentation review, the inspector concluded that the licensee's central and secondary alarm stations (CAS/SAS) were equipped to support the site security function. Plans and procedures were provided which contained clear guidance and the CAS/SAS operators were aware of performance requirements. (Section S2.2).

- Implementation of protected area access control of personnel was less than effective because of the potential for authorized personnel to allow protected area access to unauthorized personnel without the security force's knowledge. One violation of regulatory requirements was noted (96-13-01). (Section S2).

- The inspector determined that Security Procedure - 12 provided adequate guidance for the security force to perform required testing on security equipmenty, however; during discussion with security management and the shift supervisors, the inspector noted that the licensee had not included in the procedure a checklist for recording the performance test (30/30) results that are required to be performed quarterly; after each inoperative state; or after major maintenance or repair to a security system. This test is conducted to determine the ability of the equipment to detect individuals' attempting to gain unauthorized entry.

- The Training and Qualification program continued to be well managed and record keeping continued to be a strength. The inspector noted that the annual test was within requirements; however, to improve the security officer's knowledge the test could be more specific of tasks to be performed to better evaluate the officers knowledge of post and patrol requirements. (Section S6).

REPORT DETAILS

S1 Conduct of Security and Safeguards Action

S1.1 Compensatory Measures

a. Inspection Scope (81700)

The inspector verified that the licensee employed compensatory measures when security equipment failed or its performance had been impaired and that the compensatory measures employed do not reduce the effectiveness of the security system that existed prior to the failure.

b. Observations and Findings

The inspector observed an officer posted as a compensatory measure for access control on November 7, 1996 and determined that the officer was knowledgeable of the reason for the compensatory measure and the required duties to be performed. Events that required compensatory measures to be implemented were reviewed and the inspector noted that in each event timely and adequate compensatory measures were established. Procedures clearly defined the duties and responsibilities for compensatory officers.

c. Conclusion

The inspector determined that the licensee employed compensatory measures when security equipment has failed or its performance has been impaired. The inspector also noted that the compensatory measures that were employed did not reduce the effectiveness of the security system that existed prior to the failure.

S2 Status of Security Facilities and Equipment

S2.2 Central and Secondary Alarm Station Operations

a. Inspection Scope (81700)

The inspector evaluated the licensee's program for central alarm station (CAS) operations and secondary alarm station (SAS) operations. This was to ensure that the CAS/SAS was capable of responding to provide reliable physical protection of vital equipment and that the licensee was in compliance with the criteria in Chapter 6 and 7 of the Industrial Security Plan (ISP), in addition to Security Procedure (SP-004), Guard/Watchperson Duties, Responsibilities and Procedures, Revision 22, dated March 13, 1996. The inspector evaluated the CAS/SAS operators on their specific duties on November 4, 5, and 7, 1996.

b. Observations and Findings

The inspector noted that the alarm station operators were provided procedures that detailed specific guidance for contingencies or emergency situations and that the alarm station operators were capable of performing their duties during normal day-to-day operation, and contingency operations.

c. Conclusions

Through observations, interviews, and documentation review, the inspector concluded that the licensee's CAS/SAS were equipped to support the site security function. The licensee had prepared plans and procedures to detail the performance requirements for the officers performing CAS/SAS duties. The operators were aware of the guidance and the CAS/SAS operators were capable of performing their duties.

S2 Status of Security Facilities and Equipment

S2.1 Protected and Vital Area Access Controls - Personnel and Vehicles

a. Inspection Scope (81700)

Based on the commitments in Chapters 1, 3, 5 and 6 of the current ISP, and Security Procedures (SP)-003, Personnel Introduction, Revision 9, dated July, 19, 1996; SP-005, Searches, Incoming Packages and Material Control, Revision 13, dated September 3, 1996; SP-007, Access Control, Personnel Identification, and Badging, Revision 47, dated August 16, 1996; and SP-008, Vehicular Access Control, Revision 21, November 5, 1996; the inspector evaluated the licensee's access control program for protected/vital areas to verify that they were functionally effective, operationally efficient and met licensee commitments. This evaluation was also to ensure that there were no vulnerabilities that could be exploited to gain unauthorized access to the protected and vital areas.

b. Observation and Findings

The security force searched for firearms, explosives, and incendiary devices at the protected area entrance. Personnel, hand-carried packages or material, delivered packages or material, and vehicles were searched before being admitted to the protected and vital areas. These searches were either by physical search or by search equipment. Security personnel are responsible for searching materials which are off loaded outside the protected area. Security personnel searched all non-exempt delivered packages and materials, specifically designated as such by the licensee, outside the vital areas.

The inspector found the following circumstances concerning personnel access control. The licensee has installed an acceptable hand geometry as an access control feature to allow access at the protected area. Based on the inspector's review, determination was made that the final access control (FAC) officer may have additional duties that would preclude him from performing the primary duties as an access control monitor.

The inspector requested the Nuclear Assessment Section (NAS) to conduct a drill to determine if the officer in the hardened enclosure charged with the duties of controlling access to the PA was capable of detecting unauthorized access. On November 7, 1996, at approximately 6:20 a.m. the inspector observed a NAS person badge and use the hand geometry equipment to gain access to the PA. After the NAS person was authorized access, the individual moved out of the area and allowed another NAS individual to gain unauthorized access to the PA. The licensee's security force failed to detect the unauthorized individual accessing into the PA. The factors that contributed to the FAC officer in the hardened bullet resistant enclosure failing to detect the unauthorized act was due to the location of the officer and the numerous other duties that the officer was required to perform, which detracted from his primary duties of controlling access. The licensee immediately established compensatory measures and were in the process of reviewing possible corrective actions for the deficiency.

Industrial Security Plan (ISP), Revision 32, dated April 26, 1996, Paragraph 1.6.2, states that "turnstiles are located in the Personnel Access Points (east and west) and are controlled by members of the security force from within bullet resistant structures."

Security Procedure - 003, Personnel Indoctrination, Revision 9, July 19, 1996, paragraph 3.1.11 requires that personnel be alert to unauthorized. "tailgaters" Paragraph 5.0 of the same procedure states that the security program ensures that unauthorized persons cannot enter undetected into the protected or vital areas.

Security Procedure - 007, Access Control, Personnel Identification, and Badging, Revision 47, dated August 16, 1996, Paragraph 6.1.1.2 states that personnel access to the protected area (PA) will normally be controlled by electrically operated turnstiles or gates. Access through the turnstile is normally accomplished by inserting a badge into the cardreader and placing the user's hand in a hand geometry reader for verification. If the security computer indicates that the badge data in the computer matches the user's hand, the locking device on the turnstile will release allowing access. Access into the PA is monitored by a member of the security force who is located in the Access Control Station (ACS).

Access control program records were available for review and contained sufficient information for identification of persons authorized access to the protected/vital areas.

c. Conclusion

This evaluation of the access controls for personnel and vehicles revealed that the criteria in Chapters 1, Paragraph 1.6.2 which states that "turnstiles located in the personnel access points (east and west) and are controlled by members of the security force from within bullet resistant structures," and the criteria of SP-007 which states that "access into the PA is monitored by a member of the security force who is located in the Access Control Station (ACS)" were not being met and is a violation of regulatory requirements. (96-13-01). (Section S2)

S2.4 Testing and Maintenance

a. Inspection Scope (81700)

The inspector verified that the licensee implements programs that will ensure the reliability of physical protection-related equipment and security-related devices including proper installation, testing and maintenance to promptly replace defective equipment.

b. Observations and Findings

The inspector reviewed the licensee's Security Procedure 12, Revision 44, dated September 13, 1996, Verification of Security Component Operation, Chapter 12, Test, Inspections, and Maintenance of the current ISP, Security Procedure (SP-12), Revision 45, dated September 13, 1996 and Security Procedure (SP-021), Security System Tamper and Line Supervision Test, provides the guidance for the scheduling, documentation, and performance of inspections, maintenance, and testing of physical security system.

In the procedures the licensee requires that the senior member of the security force, upon notification of a discrepancy in the Intrusion Detection System, CCTV, Access Control System, physical barriers, or other security component, to provide proper compensatory measures, report the deficiencies and to request maintenance support to fix the system.

Security Procedure 12 requires that an operability test be performed by making less than 30 attempts to test a system detection capability, daily and weekly. The procedure also states that performance tests are required to be conducted quarterly, after each inoperative state, or after major maintenance or repair to a security system. This test is conducted to determine the ability to detect individuals attempting to gain unauthorized entry. The inspector reviewed the licensee's log entries to determine if the 30/30 test was being conducted as required. The inspector determined that the test could have been conducted as required; however, it was very difficult to determine that the testing was accomplished through review of the logs, computer print-outs and maintenance records. The licensee agreed and stated they would create a form to log the 30/30 tests as they were accomplished. The form has been created and included as part of the procedure.

The inspector reviewed the licensee's corrective action for violation 50/261/96-03-01, and determined that the licensee as part of the corrective action had revised Security Procedure (SP)-012, "Verification of Security Component Operation", on February 29, 1996, to include the 30 consecutive tests for hand geometry. The hand geometry units were successfully tested in accordance with SP-12 on March 1, 1996, and the test results were included in the modification installation documentation.

Additionally as part of the corrective action the individuals involved in the engineering aspects of this issue were counseled regarding the adequacy of reviews of modifications which involve changes to the licensing basis of the plant.

c. Conclusion

The inspector determined that SP-12 provided adequate guidance for the security force to perform the required test; however, during discussion with security management and the shift supervisors; the inspector noted that the licensee had not included in the procedure a checklist for recording the performance test results that are required to be performed quarterly; after each inoperative state; or after major maintenance or repair to a security system. This test is conducted to determine the ability of the equipment to detect individuals attempting to gain unauthorized entry.

S5 Security Safeguards Staff Training and Qualification

S5.1 Security Training and Qualification

a. Inspection Scope (81700)

Based on the Training and Qualification (T&Q) Plan, Revision 5, September 29, 1993, the inspector verified that before being permitted to act as a guard, watchperson, armed response person, or member of the security organization, such individuals have been trained, equipped and qualified to perform each assigned security-related job task or duty in accordance with the approved T&Q Plan.

The inspector interviewed a sample of physical security personnel to determine if they possess adequate knowledge and ability to carry out their assigned duties and responsibilities.

The inspector verified during the inspection that the total number of trained officers and armed personnel were immediately available at the facility to fulfil the response role.

b. Observation and Findings

The inspector verified through interviews and observation of officers performing their duties that they were trained and qualified to perform their task as required. The officers were observed performing patrol, CAS/SAS, access control, vehicle search and compensatory duties.

The inspector noted that the individuals were properly armed and qualified as necessary every 12 months. The inspector noted that the officers fire a combat course both day and night. Hand gun qualification is 75%. Shotgun qualification is 50% of all pellets (36 of 72 pellets) within the black silhouettes. The semiautomatic rifle qualification score is 80% of the total obtainable score which is 200 out of a possible total of 250.

While reviewing the annual written examinations the inspector note that the exams were not detailed in the specific task areas being evaluated, i.e., exams on response duties contained more questions on access control or searching than on response force duties. The licensee agreed to review the exams and make changes as necessary.

c. Conclusion

The Training and Qualification program continues to be well managed and records keeping continues to be a strength. The inspector noted that the annual tests were within requirements, however; to better evaluate the security officers knowledge on post and patrol requirements the tests could be more specific to the task to be performed. (Section S6).

S8 Miscellaneous Security and Safeguards Issues

Actions on Previous Inspection Findings (92904)

(CLOSED) VIO 50-261/96-03-01. The licensee's corrective action, as described in Section S2.4 closes this violation.

(CLOSED) VIO 50-261/96-03-02. The licensee's corrective action for the failure to control safeguards information was reviewed by the inspector. The licensee had modified the control of safeguards procedures, implemented an aggressive review of safeguards material to declassify material not considered safeguards, reduced the number of areas for storage of safeguards material, placed stringent controls on access to safeguards material, and developed one of the best training films that the inspector has reviewed to train employees on the handling, storage and marking of safeguards information.

(CLOSED) VIO 50-261/96-10-02. The licensee's corrective action for the failure to maintain at least 0.2 footcandles of lighting under two railcars was reviewed and considered adequate to close the violation. The licensee had taken disciplinary action on the personnel involved, and revised the security procedures to include compensatory measures in the event that illumination decreases below the established requirements. The security force lesson plans were revised and training was conducted to highlight that security officers maintain cognizance of the area illumination.

Management Meetings

X1 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on November 8, 1996. The licensee acknowledged the findings presented.

The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

H. Chernoff, Regulatory Programs
T. Eaddy, Jr., Superintendent Engineering and Chemical
A. Geanoa, Project Analyst Licensing
J. Harriston, Nuclear Assessment Section
P. Jenny, Nuclear Assessment Section
J. Morris, Superintendent I&C/Electrical Maintenance
B. Myer, Manager Operations
R. Newman, Peer Assessor, Nuclear Assessment Section
D. Taylor, Controller
R. Warden, Manager Nuclear Assessment Section
S. Young, Superintendent Security

NRC

J. Zeiler, Resident Inspector

INSPECTION PROCEDURES USED

IP 81700: Physical Security Program for Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

Type	Item Number	Status	Description and Reference
VIO	50-390/96-13-01	Open	Failure to Properly Control Access to the Protected Area.

Closed

Type	Item Number	Status	Description and Reference
VIO	50-390/96-03-01	Closed	Failure to Properly Test Newly Installed Equipment.
VIO	50-390/96-03-02	Closed	Failure to Properly Control Safeguards Information
VIO	50-390/96-10-02	Closed	Failure to Maintain Proper Lighting