

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 50-261

License No: DPR-23

Report No.: 50-261/97-05

Licensee: Carolina Power and Light Company

Facility: H. B. Robinson Steam Electric Plant

Location: 3581 West Entrance Road
Hartsville, SC 29550

Dates: March 17-21, 1997

Inspector: D. H. Thompson, Safeguards Specialist

Approved by: P. E. Fredrickson, Chief, Special Inspection Branch
Division of Reactor Safety

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EXECUTIVE SUMMARY

H. B. Robinson Steam Electric Plant
NRC Inspection Report 50-261/97-05

This safeguards inspection included aspects of licensee plant support. The report covers a week period of an announced routine inspection by a regional safeguards specialist inspector.

Plant Support

- The random review of plans, records, reports, and interviews with appropriate individuals verified that security plan and procedure changes did not decrease the effectiveness of the Industrial Security Plan (ISP). The inspector reviewed Revision 33, dated January 7, 1997, to the ISP and concluded that the ISP change as submitted meets the requirements of 10 CFR 50.54(p). (S3.1)
- Licensee management provided appropriate and excellent support for the Physical Security Program. Examples of the excellent management support were the construction of an outstanding firing range, and the funding for an upgrade of the security computer system. (S6.1)
- The licensee evaluated non-human errors, hardware and mechanical problems and they were effectively controlled and managed. In September 1996, the false and nuisance alarm rate for the intrusion detection alarm system exceeded the requirements of the ISP. Although the licensee was conducting an alarm analysis, they were not interpreting the data correctly and the alarm rate met the requirements of the ISP. (S6.2)
- Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The last audit report concluded that the security program was effective and recommended appropriate action to improve the effectiveness of the security program, and the licensee had acted appropriately in response to recommendations made in the audit report. Audit items were reviewed, appropriately assigned, analyzed and prioritized for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. (S7.1)

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Report Details

IV. Plant Support

S3 Security and Safeguards Procedures and Documentation

S3.1 Security Program Plans

a. Inspection Scope (81700)

The inspector reviewed appropriate chapters of the licensee's Industrial Security Plan (ISP), Revision 33, dated January 7, 1997, and security procedures as listed in paragraph S3.1(b).

b. Observations and Findings

Review of the changes, submitted to the NRC in Revision 33 to the ISP for approval verified that the ISP changes as submitted are in compliance with the requirements of 10 CFR 50.54(p). Most of the changes were grammatical and position/title changes. The inspector reviewed the changes to security procedures SP-002, Security Organization Duties, Responsibilities and Procedures, SP-010, Records, Reports, Inspections, and Administrative Surveillance Procedure, and SP-012, Verification Security System Component Operation.

c. Conclusions

The random review of plans, records, reports, and interviews with appropriate individuals verified that security plan and procedures changes did not decrease the effectiveness of the Industrial Security Plan (ISP). The inspector reviewed Revision 33, dated January 7, 1997, to the ISP and concluded that the ISP change as submitted met the requirements of 10 CFR 50.54(p). There were no violations of regulatory requirements found in this area.

S6 Security Organization and Administration

S6.1 Management Support

a. Inspection Scope (81700)

The inspector evaluated the degree of the licensee's management support to the Physical Security Program. Based on the requirements contained in the ISP, the inspector reviewed the Licensee's Safeguards Event Log (SEL) entries. This review was to determine if the licensee appropriately assigned, analyzed, and set priorities for corrective action for the reports and log entries, and whether the corrective action taken was technically adequate and timely.

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b. Observations and Findings

The licensee had an on-site physical protection system and security organization. Their objective was to provide assurance against an unreasonable risk to public health and safety. The security organization and physical protection system were designed to protect against the design basis threat of radiological sabotage as stated in 10 CFR 73.1(a). A contract security force provided site security for the licensee. At least one full-time manager of the security organization was always on-site. This individual had the authority to direct the physical protection activities of the organization. The management system included a mechanism for establishing, maintaining, and enforcing written security procedures. Security Procedure, SP-002, Security Organization, Duties, Responsibilities and Procedures, Revision 15, dated September 24, 1996, documented the structure of the security organization, and detailed the duties of the security force and other individuals responsible for security. Licensee management exhibited an awareness and favorable attitude toward physical protection requirements. This continued to be evident by the on-going construction of an excellent firing range facility, and the planned upgrade of the security computer system.

The review of the SELs as of 3rd and 4th Quarter 1996 and 1st Quarter 1997 indicated the following:

EVENTS	4th Quarter '96	3rd Quarter '96	*1st Quarter '97
Human Errors	09 (07%)	05 (13%)	00 (0%)
Hardware Systems	123 (93%)	33 (87%)	53 (100%)
Other Events	0	0	0
TOTALS	132 (100%)	38 (100%)	53 (100%)

Each quarter had an excellent Trending Summary report that was provided to site management. * March events statistics are not included.

The security force remains very stable and there had been only one security force member turnover in 1997. There were no compensatory measures in effect at the time of the inspection. Review of previous compensatory measures indicated that the licensee had 60.1 hours of compensatory measures in January 1997. Review of the outstanding security work-orders showed the following:

- 0 High Priority (#1) orders (outage related)
- 0 Medium Priority (#2)
- 7 Low Priority (#3)

TOTAL 7 outstanding security work-orders. (0 of the 7 are work-orders that involve regulatory requirements)

c. Conclusions

The inspector found that licensee management provided appropriate and excellent support for the Physical Security Program. Examples of the excellent management support were the construction of a outstanding firing range, and the funding for an upgrade of the security computer system. There were no violations of regulatory requirements found in this area.

S6.2 Effectiveness of Management Control

a. Inspection Scope (81700)

The inspector evaluated the adequacy of the licensee's controls for identifying, resolving and preventing problems by reviewing such areas as corrective action systems, root cause analyses, and self assessment in the area of physical security. Also, this inspection was to determine whether there are strengths or weaknesses in the licensee's controls for the identification and resolution of the reviewed issues that could enhance or degrade plant operations or safety.

b. Observations and Findings

To determine the adequacy of the above, the inspector reviewed the licensee's SEL entries. This review was to determine if the licensee appropriately assigned, analyzed, and set priorities for corrective action for the reports and log entries, and whether the corrective action taken was technically adequate and timely.

The root cause analyses, corrective actions, and self assessment, as mentioned in paragraph S6.1 above and in paragraph S8.1 below, were reviewed and found appropriate and adequate. As part of the ISP review the inspector noted that the licensee had included in the previously approved ISP, that the Intrusion Detection System (IDS) may not meet the false nuisance alarm rate. However, during discussion with the licensee they indicated that they intended to meet the required false nuisance alarm rate. Additionally, to support their comments the inspector noted that the Nuclear Assessment audit conducted February 3-14, 1997, documented that the false and nuisance alarm rate for the perimeter intrusion detection system did not meet the performance criteria in the ISP. Additional support to indicate that the licensee intended to meet the false nuisance alarm rate was a documented adverse performance trend in Condition Report (CR) 96-02324, dated September 20, 1996. During discussion with the licensee concerning the continued failure to establish and meet the false and nuisance alarm rate, the inspector requested the licensee to review the way that they counted alarms and to apply the proper criteria for establishing the false and nuisance alarm rate for the months of February 1997, and the first 2 weeks of March. Based on the proper criteria being applied the licensee's IDS did meet the false and nuisance alarm rate as required by the ISP. Although the IDS is meeting the false and nuisance alarm rate the Engineering Section, based on their response to CR 96-02324, will continue to follow the action plan to improve the

performance level of the alarm system by placing the IDS on a preventative maintenance schedule that will include cleaning and also install the 5000 series hardware on the E-Field zones. The inspector discussed with the licensee the need to review the IDS false and nuisance alarm rate prior to February 1997, to ensure that the IDS alarms met the false and nuisance alarm rate criteria for the past six months.

c. Conclusions

The inspector concluded that the licensee evaluated non-human errors, hardware and mechanical problems and they are effectively controlled and managed. The inspector noted that in September 1996, security management had determined that the false and nuisance alarm rate for the intrusion detection alarm system exceeded the requirements of the ISP. During further discussion, the inspector concluded that although the licensee was conducting a false and nuisance alarm analysis, they were not interpreting the data correctly and that the false and nuisance alarm rate met the requirements of the ISP. The licensee will continue with the engineering action plan to provide better preventative maintenance program and install the compatible 5000 series terminators to complement the previously installed controllers. There were no violations of regulatory requirements found in this area.

S7 Quality Assurance in Security and Safeguards Activities

S7.1 Audits and Corrective Actions

a. Inspection Scope (81700)

Based on the commitments of the ISP, the inspector evaluated the licensee's audit program and corrective action system. This also ensured compliance with the requirement for an annual audit of the security and contingency programs. During the inspection, a small representative sample of the problems identified by audits was evaluated by the inspector to determine whether review and analysis were appropriately assigned, analyzed, and prioritized for corrective action and whether the corrective action taken was technically adequate and performed in a timely manner.

b. Observations and Findings

The licensee's program commitments included auditing its security program, including the Safeguards Contingency Plan, at least every 12 months. The audit included a review of routine and contingency security procedures and practices. This review evaluated the effectiveness of the physical protection system testing and maintenance program. The Nuclear Assessment Section Audit Group prepared report R-SC-97-01, dated March 12, 1997. This audit was conducted during the period of February 3-14, 1997. The report was sent to the site vice president and corporate management. Reports of audits were available for inspection at the plant for a period of three years. There were two strengths, three issues, five weaknesses, and three items for management consideration identified. The audit conclusion was, "The security

program at the H. B. Robinson Site is effective in support of the safe operation of the Robinson Nuclear Plant."

c. Conclusions

Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The last audit report concluded that the security program was effective and recommended appropriate action to improve the effectiveness of the security program, and the licensee had acted appropriately in response to recommendations made in the audit report. The inspector determined that audit items were reviewed, appropriately assigned, analyzed and prioritized for corrective action. The corrective actions taken were technically adequate and performed in a timely manner. There were no violations of regulatory requirements found in this area.

S8 Miscellaneous Security and Safeguards Issues

S8.1 (CLOSED) Violation 50-261/96/13-01, Failure to properly control access to the protected area.

The corrective action for violation 50-261/96/13-01 concerning an individual gaining unauthorized access to the protected area because the final access control officer was assigned duties that detracted from the primary duties of observing personnel accessing into the protected area was reviewed and closed during the inspection.

The corrective action to the violation was reviewed and the inspector noted that the licensee had upon identification immediately established a compensatory security position at the turnstiles. As additional interim measures, a temporary barrier between protected area entrance turnstiles was provided to separate entry lanes, and a demarcation line was painted on the floor in front of the turnstiles to limit access to the turnstiles to one person at a time. Also, the entry turnstile "time-out" feature was changed to a shorter period of time. The computer console was moved from the Access Control Station (ACS) to the Central Alarm Station and the Secondary Alarm Station. This resulted in the realignment of ACS responsibilities and functions, other than those of final access control. Training was conducted on the responsibilities and duties of the final ACS. Based on the inspector's review of the licensee's corrective action, the violation is closed.

V. MANAGEMENT MEETING

X1 Exit Meeting Summary

The inspector presented the inspection results to licensee management at the conclusion of the inspection on March 21, 1996. The licensee acknowledged the findings presented.

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Although reviewed during this inspection, proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Chernoff, H., Supervisor, Licensing Regulatory Programs
 Clements, J., Manager, Site Support Services
 Crook, R., Senior Analyst, Licensing Regulatory Programs
 Guthrie, W., Senior Analyst, Security
 Harrison, J., Project Engineer
 Hinnant, C., Site Vice President
 Keenan, J., Director, Site Operations
 Robertson, C., PES Assessor
 Wilkerson, T., Manager, Regulatory Affairs
 Young, D., Plant General Manager
 Young, S., Superintendent, Security

NRC

Desai, B., Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 81700: Physical Security Program for Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Closed</u>	VIO	50-261/96-13-01	Failure to control access to the protected area.
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