

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-269, 50-270, 50-287
License Nos: DPR-38, DPR-47, DPR-55

Report Nos.: 50-269/96-18, 50-270/96-18, AND 50-287/96-18

Licensee: Duke Power Company

Facility: Oconee Nuclear Station, Units 1, 2 and 3

Location: 422 South Church Street
Charlotte, NC 28242

Dates: November 11 - 22, 1996

Inspectors: W. Stansberry, Safeguards Specialist

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

Enclosure

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EXECUTIVE SUMMARY

Oconee Nuclear Station, Unit 1, 2 and 3
NRC Inspection Report 50-269/96-18, 50-270/96-18, and 50-287/96-18

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

- The random review of plans, records, reports, and interviews with appropriate individuals verified that changes did not appear to decrease the effectiveness of the Security/Contingency Plan (S/CP). There were no violations of regulatory requirements found in this area (Section S3).
- The licensee provided appropriate and adequate support for the Physical Security Program. This was based on the review of the S/CP, Security Event Logs (SEL), Licensee Event Reports and records, and interviews with management, support, and security personnel. The excessive nuisance alarm rate will be reviewed in subsequent inspections to monitor the licensee's progress in meeting the S/CP commitment. This will be tracked as an Inspector Followup Item (IFI) 50-269, 270, 287/96-18-01. A security photo-ID badge with CAD card access to protected and vital areas was mis-issued. This will be tracked as a Non-Cited Violation (NCV) 50-269, 270, 287/96-18-02 (Section S6).
- Evaluation of the effectiveness of management control indicate that human errors and hardware problems are being effectively controlled and managed. The licensee has not been successful in eliminating or decreasing the hardware errors pertaining to the nuisance alarms. Root cause analyses on the SELs was a strength. There were no cited violations of regulatory requirements found in this area (Section S6).
- Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit report 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 all the above 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.

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 Duke Power Company Nuclear Security and Contingency Plan (S/CP), Revision 04, dated April 18, 1996 and the Nuclear Security Training and Qualification Plan, Revision 02, dated April 18, 1996.

b. Observations and Findings

Review of the changes, Revisions 1 through 4 to the PSP reported or submitted for approval verified their compliance to the requirements of 10 CFR 50.54(p) or 50.90. Most of the changes were grammatical, and position/title changes. Necessary coordinating changes were also incorporated for the merged S/CP that resulted in a consolidated S/CP for each of the three Duke Power nuclear power plants.

c. Conclusions

The random review of plans, records, reports, and interviews with appropriate individuals verified that changes did not appear to decrease the effectiveness of the S/CP. 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 S/CP, the inspector reviewed the Licensee's Event Reports (LERs) and the 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.

b. Observations and Findings

The licensee had an onsite physical protection system and security organization with the objective 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 proprietary security force provided site security for the licensee. At least one full-time manager of the security organization was always onsite. 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. These procedures documented the structure of the security organization, and detailed the duties of the security force and other individuals responsible for security. The licensee's management system provided for written approval of procedures and revisions thereto by the individual who had general responsibility for security functions. Licensee management exhibited an awareness and favorable attitude toward physical protection requirements. There were no LER's to review.

The review of the SELs as of the end of the 3rd quarter 1996 indicated the following:

EVENTS	1st Quarter '96	2nd Quarter '96	3rd Quarter '96
Human Errors	68 (64%)	26 (37%)	26 (35%)
Hardware Systems	38 (36%)	44 (63%)	48 (65%)
TOTALS	106 (100%)	70 (100%)	74 (100%)

The overall trend of SELs for Oconee since the 1st Quarter 1995 has been down, with a seven quarter average of 88 events per quarter. Forty-five of the 68 Human Errors in the 1st quarter were from unsecured security doors. A Problem Investigation Process (PIP) was initiated because of this adverse trend. Through increased maintenance surveillance and management involvement, the unsecured door entries decreased to 12 in the 2nd quarter and 13 in the 3rd quarter. The unusual high number of hardware/system events were from perimeter intrusion detection events, 19, 28 and 20 for the 1st, 2nd and 3rd quarters, respectively. The licensee attributed them to unusual severe weather and an increase in the nuisance alarm rate caused by animals. The number of alarms has doubled each year since 1994, causing the licensee to exceed the commitment in the S/CP, Chapter 8, paragraph 8.3.1.2. This commitment states that a nuisance alarm (NA) rate of not more than one NA per zone per day, when averaged over a period of not more than 10 consecutive days for all 51 zones shall be considered acceptable. The licensee exceeded this acceptance criteria in 27 out of the 32 ten day periods between January 1, 1996 and November 15, 1996. The licensee believed that this problem was caused by the increased development of the surrounding area and the Backyard Wildlife Habitat Projects begun by the licensee in February 1995. These projects were to provide an environment that would encourage wildlife population growth in the area surrounding the site. Security has made recommendations to management to aid in the reduction of NAs. The nuisance alarm rate exceeding the commitment in the S/CP will be reviewed in subsequent inspections to monitor the licensee's progress in meeting the above S/CP commitment. This will be tracked as an Inspector Followup Item (IFI) 50-269, 270, 287/96-18-01.

Each quarter's trending information of the SELs was reviewed by the licensee. During a review on August 29, 1996, it was discovered that there were five incidents of mis-issued badges within a four month period of time. Only one incident resulted in a protected area entry. The other four events were discovered during badge verification at the explosive detector. This finding was entered into the licensee's PIP program, as PIP 4-096-1663. The PIP identifies the problem, reviews its significance, evaluates the problem, proposes corrective actions, and has a final and overall approval. The event that allowed protected area access resulted in PIP 4-096-1602. Security Procedure No. 506, dated 8/5/96, "PAP Door Officer", states in paragraph 4.2 that the primary access portal (PAP) officer shall ensure that the individual accessing the protected area is properly badged. Security Procedure No. 508, dated 8/2/95, "Badging Officer", states in paragraph 4.1.2 that security personnel shall check the picture against the individual requesting a badge for positive visual identification, verify that the badge number is correct, and state the person's last name. Paragraph 4.1.5, requires the badge to be keyed onsite. The badge's information is displayed on a monitor to further verify the correct badge number and the individual's name. Contrary to the above, on August 20, 1996, at 0647 hours, Security Badge No. M200 was mis-issued to an individual who had a higher access clearance than the original person assigned to badge M200. At 0700 hours the person with the mis-issued badged returned to the primary access portal (PAP), reporting that he had been issued the wrong badge. The event was logged in the Safeguards Event Log at 0905 hours on August 20, 1996. The PIP was initiated on August 20, 1996 and closed on October 2, 1996. This violation will not be subject to enforcement action because the licensee's efforts in identifying and correcting the violation meets the criteria specified in Section VII.B of the Enforcement Policy. The mis-issued security photo-ID badge with CAD card access to protected and vital areas event will be tracked as a Non-Cited Violation (NCV) 50-269, 270, 287/96-18-02.

There have been no security force turnovers since May 6, 1996, in fact, 26 more security officers have been recently hired. There were five compensatory measures in effect at the time of the inspection due to the three reactor outages. Review of the outstanding security work-orders showed that there were five outstanding. None of the work-orders required compensatory measures. The oldest work-order was dated August 8, 1996.

c. Conclusions

The inspector found that the licensee provided appropriate and adequate support for the Physical Security Program. This was based on the review of the S/CP, SELs, LERs and records, and interviews with management, support, and security personnel. The licensee has not been successful in eliminating or decreasing the hardware errors pertaining to the NAs. Mis-issued badge problems were addressed appropriately by management. There were no cited 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 were 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 Event Reports (LERs), the Safeguards Event Log (SEL) entries and responses to cited violations. 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 review of the LERs and SELs indicated a decrease in reportable events since 1995. SELs have declined except for increases during outages. Hardware related events have increased. This problem is discussed in the above paragraph.

The root cause analyses, corrective actions and self assessment, as mentioned in paragraph S6.1 above and in paragraph S8 below, were reviewed and found appropriate and adequate.

c. Conclusions

Evaluation of the effectiveness of management control of the above noted areas indicated that human errors and hardware problems were being effectively controlled and managed. Root cause analyses on the SELs was a strength. There were no cited 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 Chapter 11 of the S/CP, the inspector evaluated the licensee's audit program and corrective action system. This inspection also verified 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 audited items were properly reviewed and analyzed, appropriately assigned, 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, annually. This is defined in the SC/P as at least every fifteen months. The audit included a review of routine and contingency security procedures and practices and evaluated the effectiveness of the physical protection system testing and maintenance program. The Nuclear Assessment and Issues Division, Regulatory Audit Group prepared report SA-96-01(ON)(RA)(Station Security) dated January 31, 1996. This audit was conducted during the period of January 15, 1996 through January 18, 1996 at the Oconee site. 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 at least three years. There were three strengths, one finding and two recommendations.

c. Conclusions

Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The audit report 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 all the above 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 Plant Support - Follow-up (92904)

(CLOSED) VIO-50-269, 270, 287/95-04-01. Failure to control Safeguards Information (SGI) in an automated data processing system. The inspector reviewed PIP No. 4-095-0249 that was initiated on February 20, 1995. The corrective actions of the PIP showed the follow actions were implemented. The file server was taken off-line and searched for additional SGI. SGI found was deleted from the server. An appropriate root cause analysis was conducted, resulting in approximately 3400 PCs, work stations, mainframes and servers in four locations being searched, with negative results. The Senior Vice President issued an Awareness Bulletin and the Site Vice President issued a special bulletin with specific directions to scan Oconee PCs. A trailer was located inside the protected area to centralize and secure all files associated with Engineering Safeguards. SGI electronic files were identified by a ".SGI" suffix to the file name. Nuclear Policy Manual, Nuclear System Directive: 206, "Safeguards and Information Control", was appropriately revised to reflect the corrective actions to this violation.

V. Management Meeting**X1 Exit Meeting Summary**

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

E. Burchfield, Manager, Regulatory Compliance, Oconee Nuclear Station (ONS)
 J. Davis, Manager, Station Engineer, ONS
 D. Hubbard, Superintendent, Maintenance, ONS
 J. Peele, Station Manager, ONS
 J. Smith, Specialist, Regulatory Compliance, ONS
 J. Twiggs, Manager, Radiation Protection, ONS
 L. Wilkie, Manager, Safety Review, ONS

NRC

M. Scott, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 81700: Physical Security Program for Power Reactors
 IP 92904: Followup - Plant Support

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Closed</u>	VIO	95-04-01	Uncontrolled Safeguards Information found by the licensee in an automated data system.
<u>Opened</u>	IFI	96-18-01	Nuisance alarm rate exceeds the commitment in the S/CP.
<u>Opened</u>	NCV	96-18-02	Mis-issued security photo-ID badge with CAD card access to protected and vital areas.