

ENCLOSURE 1

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-313, 50-368
License Nos.: DPR-51, NPF-6
Report No.: 50-313/97-16, 50-368/97-16
Licensee: Entergy Operations, Inc.
Facility: Arkansas Nuclear One, Units 1 and 2
Location: Junction of Hwy. 64 West and Hwy. 333 South
Russellville, Arkansas
Dates: July 21-25, 1997
Inspector: D. Schaefer, Security Specialist, Plant Support Branch
Approved By: Blaine Murray, Chief, Plant Support Branch
Division of Reactor Safety
ATTACHMENT: Supplemental Information

EXECUTIVE SUMMARY

Arkansas Nuclear One, Units 1 and 2
NRC Inspection Report 50-313/97-16; 50-368/97-16

This was an announced inspection of the licensee's physical security program. The areas inspected included records and reports, testing and maintenance, assessment aids, alarm stations, communications, security program plans and procedures, access control of personnel packages and vehicles, management support, and security program audits.

Plant Support

- A very good records and reports program was in place. The security staff was correctly reporting security events. A noncited violation was identified involving the failure to maintain proper audible alarms for metal detectors used to search individuals prior to entry into the protected area (Section S1.1).
- An excellent testing and maintenance program was in place. Timely repair of security equipment resulted in a low number of compensatory posting hours for security officers (Section S2.1).
- Assessment aids provided excellent assessment of the perimeter detection zones. Technicians provided excellent service support and routinely repaired problems with closed-circuit television cameras in a timely manner (Section S2.2).
- The alarm stations were redundant and well protected. Alarm station operators were alert and well trained (Section S2.3).
- An excellent security radio communication system was maintained. A proper number of portable radios were available for members of the security organization. Cellular telephones were provided to selected members of each security shift (Section S2.4).
- Changes to security programs and plans were reported within the required time frame (Section S3.1).
- An excellent program for searching personnel packages and vehicles was maintained. Background investigation records for individuals granted unescorted access authorization were complete (Section S4.1).

- Senior management support for the security organization was very good. The security program was implemented by a well trained and highly qualified staff. The morale of the security officers was very good (Section S6.1).
- Security program audits were good. The security audit did not include the review process of background investigation records for individuals denied unescorted access to the plant (Section S7.1).

Report Details

IV. Plant Support

S1 Conduct of Security and Safeguards Activities

SI.1 Records and Reports (81700-02.01)

a. Inspection Scope

The inspector reviewed safeguards event logs and security incident reports to determine compliance with the requirements of 10 CFR 73.21(b) and (c), 10 CFR 26.73, and the physical security plan.

b. Observations and Findings

The inspector reviewed the security event logs from April 1996 to June 1997. The records were available for review and maintained for the time required by regulations. The inspector determined that the licensee conformed to the regulatory requirements regarding the reporting of security events. The logs and incident reports were organized in numerical sequence and easy to audit. The licensee's records included trending and analysis of perimeter and security door alarms, and lost/unattended security badges.

A licensee security incident report identified that on March 12, 1997, at approximately 0900 hours, a licensee technician, performing preventative maintenance on security equipment, turned down (off) the audible alarm on two metal detectors at the Secondary Guard Station, and failed to notify the licensee security staff. The metal detectors include both an audible and a visual alarm; the visible alarm remained operational. The audible alarms remained turned down (off) until approximately 0845 hours, March 13, 1997, when the two metal detectors failed a daily security operational test. At that time, the metal detectors were removed from service until the deficiency was corrected.

Section 3.2.1.5 of the licensee's physical security plan requires, in part, that prior to entry into the protected area, all individuals be searched by metal detectors having local (audible and visual) annunciators.

The licensee's investigation of this event determined that:

- The audible alarm on the two metal detectors at the Secondary Guard Station remained turned down (off) from approximately 0900 hours March 12, 1997, to approximately 0840 hours, March 13, 1997.
- During the time the audible alarm was turned down (off), the metal detectors were functioning with the exception of the audible alarm.

- The two metal detectors were not capable of alerting security personnel, and were considered inoperable for the period that the audible alarms were turned down.
- Even though the visual alarm remained operational via a bar graph display, the absence of an audible alarm could allow an alarming condition to go unnoticed.
- On March 13, 1997, during the absence of audible alarms, the licensee determined that approximately 300 personnel processed through the two metal detectors and entered the protected area.

The licensee's corrective actions for this event were as follows:

- On March 13, 1997, all maintenance of security equipment was temporarily stopped until all technicians were briefed on the event.
- Whenever maintenance is performed on security equipment and the volume control on a metal detector is turned down, the entire search "lane" will be declared out of service, and the security officer in charge of the lane will be notified. The technician will ensure acknowledgment by the officer.
- When the audible alarm on a metal detector is disabled, the technician will affix a "Audible Alarm Disabled" sign to the metal detector.
- The security officer will log the equipment status in the equipment log. Upon completion of service, the security officer will test the proper operation of the audible alarm feature prior to returning the equipment to service.

The failure to maintain proper audible alarms for the metal detectors is considered a violation of Section 3 of the industrial security plan. The violation was licensee identified, nonrepetitive, and corrected within a reasonable period of time.

Accordingly, the violation is being treated as a noncited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy (313;368/9716-01).

c. Conclusions

A very good records and reports program was in place. The security staff was correctly reporting security events. A noncited violation was identified involving the failure to maintain proper audible alarms for metal detectors used to search individuals prior to entry into the protected area.

S2 Status of Security Facilities and Equipment

S2.1 Testing and Maintenance (81700-02.07)

a. Inspection Scope

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

b. Observations and Findings

The inspector determined through interviews with security officers and supervisors and a review of records that security equipment repairs were completed in a timely manner. The timely response to repair detection aids, access control equipment, vital area portals, alarm station equipment, and closed circuit television cameras resulted in an extremely low number of compensatory postings.

The inspector determined through interviews and a review of records that proper tests were conducted on the following: security computer; closed-circuit television cameras; on and off site communications; metal and explosive detectors; x-ray machines; perimeter microwave zones; and protected and vital area barriers and portals. The testing and maintenance program was a strength of the overall security program.

c. Conclusions

An excellent testing and maintenance program was conducted and documented. Timely repair of security equipment resulted in a low number of compensatory postings.

S2.2 Assessment Aids (81700-02.06)

a. Inspection Scope

The inspector reviewed the assessment aids 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 during the hours of daylight from July 22-23, 1997, and determined that the licensee had an excellent assessment aids system. The fixed closed-circuit television cameras were positioned to ensure effective coverage. Camera resolution was excellent. Additionally, the inspector determined through interviews and a review of records that plant technicians

provided excellent service support. Licensee records indicated that operational problems with assessment equipment were corrected in a timely manner.

c. Conclusions

Assessment aids provided excellent assessment of the perimeter detection zones. Technicians provided excellent service support and routinely repaired problems with closed-circuit television cameras in a timely manner.

S2.3 Alarm Stations (81700-02.06)

a. Inspection Scope

The alarm stations were inspected to determine compliance with the requirements of the security plan. The areas inspected included the requirements and capabilities of the alarm stations.

b. Observations and Findings

The inspector confirmed the redundancy and diversity of the alarm stations. Action by one alarm station operator could not reduce the effectiveness of the security systems without the knowledge of the other alarm station operators. The central alarm station and secondary alarm station were bullet resistant. The inspector questioned the alarm station operators and determined that they were highly trained and knowledgeable of their duties.

c. Conclusions

The alarm stations were redundant and well protected. Alarm station operators were alert and well trained.

S2.4 Communications (81700-02.06)

a. Inspection Scope

The communication capabilities were inspected to determine compliance with the requirements of the physical security plan. The areas inspected included the operability of radio and telephone systems and the capability to effectively communicate with the local law enforcement agencies through both of the systems.

b. Observations and Findings

The inspector confirmed that the licensee had radio and telephone systems capable of meeting communication requirements. The licensee maintained an adequate number of portable radios for use by members of the security organization. The licensee also had a maintenance program to insure that the batteries for the portable

radios remained at maximum operating power. All radio transmissions between the alarm stations and security officers were encrypted to ensure secure communications.

Additionally, the licensee provided selected members of each security shift with a cellular telephone. The security officers stated that these telephones effectively reduced the amount of radio "traffic" and provided an excellent means of additional communication with the alarm stations.

c. Conclusions

An excellent security radio communication system was maintained. A proper number of portable radios was available for members of the security organization. Cellular telephones were provided to selected members of each security shift.

S3 Security and Safeguards Procedures and Documentation

S3.1 Security Program Plans and Procedures (81700-02.03)

a. Inspection Scope

The physical security plan and the implementing procedures were inspected to determine compliance with the requirements of 10 CFR 50.54(p) and the physical security plan.

b. Observations and Findings

The inspector reviewed previous plan change submissions in order to determine if the changes were submitted within the required time frame and that any changes submitted did not reduce the effectiveness of the plan. The inspector reviewed implementing procedures for adequacy, ensured that the licensee maintained an effective management system for the development and administration of procedures, and 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 within the required time frame.

S4 Security and Safeguards Staff Knowledge and Performance

S4.1 Access Control of Personnel Packages and Vehicles (81700-02.05)

a. Inspection Scope

The access control program for personnel packages and vehicles was inspected to determine compliance with the requirements of the security plan.

b. Observations and Findings

The inspector determined through observations at the main and secondary guard stations, and the vehicle sallyport, that the licensee properly controlled personnel, package and vehicle access to the protected area. The protected area access control equipment was inspected and found to be functional and well maintained. The inspector observed the x-ray machine search of hand-carried packages at the main and secondary guard stations. The operators were efficient and well trained.

Additionally, the inspector reviewed 12 background investigation files for individuals granted unescorted access authorization to the protected area. These records included 7 individuals granted temporary access and 5 individuals granted permanent access. Additionally, the inspector reviewed the files for 4 individuals that had been denied unescorted access to the protected area. The inspector determined that each background investigation record contained required documentation.

The inspector observed that a background investigation record for an individual denied unescorted access included a Psychological Evaluation and Clinical Interview (form) that referenced an obsolete requirement of American National Standard (ANSI) N18.17. The requirement to conduct psychological evaluations are contained in the 1991 Access Authorization Rule, 10 CFR 73.56. The licensee stated that they would discuss this issue with the vendor performing the psychological evaluations to ensure the vendor referenced the proper regulatory requirements.

c. Conclusions

An excellent program for searching personnel packages and vehicles was maintained. Background investigation records for individuals granted unescorted access authorization were complete.

S6 Security Organization and Administration

S6.1 Management Support (81700-02.01)

a. Inspection Scope

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

b. Observations and Findings

The inspector determined by discussions with security force personnel that the security program received good support from senior management. The inspector determined that the security program was implemented by a well trained and highly qualified security staff. The security organization had a clear understanding of their duties and responsibilities.

c. Conclusions

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

S7 Quality Assurance in Security and Safeguards Activities

S7.1 Security Program Audits (81700-02.01)

a. Inspection Scope

The audits of the security program were inspected to determine compliance with the requirements of 10 CFR 50.54(p) and the physical security plan.

b. Observation and Findings

The inspector confirmed that security program audits had been conducted at least every 12 months as required. The inspector reviewed seven quality assurance audits and surveillance reports. The inspector interviewed audit personnel and confirmed that they were independent of plant security management and plant security management supervision.

Every 24 months the licensee is required to conduct an independent evaluation of the unescorted access authorization program and its conformance to the guidelines prescribed in Regulatory Guide 5.66. Section 7.2 of NUMARC 89-01 (appendix to RG 5.66) requires that each permanent employee of a utility whose employment is or will be terminated as a direct result of a denial or revocation of unescorted access authorization will: (1) be informed of the basis for denial or revocation of authorization for unescorted access; (2) have the opportunity to provide any

additional information; and (3) have the decision, together with any additional information, reviewed by another designated manager of the utility who is equivalent or senior to and independent of the individual who made the initial decision to deny or revoke unescorted access authorization.

During this inspection, the inspector determined through a review of audit reports and interviews with quality assurance staff members that the licensee's July 23 through September 11, 1996, combined audit of the fitness-for-duty and access authorization programs had not included a review of any denial or revocation records. Similarly, the licensee's previous combined audit of these programs, dated October 13, 1994, did not include a review of denial or revocation records. The inspector determined that the denial/revocation process was governed by appropriate security procedures. Additionally, the inspector's review of selected "denial" records determined that the licensee's review process met regulatory requirements.

The inspector determined that lack of a review of denial or revocation records did not involve a violation of regulatory requirements. However, it did reveal the lack of a comprehensive audit program.

During the inspection the licensee stated its intention to include a review of denial or revocation records during the next audit of the access authorization program.

c. Conclusions

Security program audits were good. The security audit did not include the review process of background investigation records for individuals denied unescorted access to the plant.

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 July 25, 1997. The licensee acknowledged the findings presented.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Hutchinson, Vice President, Operations
D. Barnhouse, Computer Specialist, Wackenhut
M. Cooper, Licensing Specialist
H. Cooper, Manager, Corporate Security, Entergy Operations
R. Dawdy, Security Coordinator, Access Authorization
D. Denton, Director, Support
D. Fowler, Supervisor, Quality Assurance
R. Fuller, Operations Manager, Unit 1
E. Gray, Security Shift Commander, Wackenhut
M. Higgins, Supervisor, Security Operations
K. Hubbard, Project Manager, Wackenhut
K. Jeffery, Security Coordinator
R. Lane, Director, Design Engineering
D. Martin, Scheduler, Security Operations
D. Mimms, Director, Licensing
K. Tate, Supervisor, Security Access Authorization
J. Vandergrift, Director, Quality
P. Weaver, Auditor, Quality Assurance
H. Williams, Jr., Superintendent, Plant Security

NRC

K. Kennedy, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 81700 Physical Security Program for Power Reactors

LIST OF ITEMS OPENED CLOSED AND DISCUSSED

Item Opened and Closed

50-313;368/9716-01 NCV Failure to utilize operable metal detectors to search all individuals prior to entry into the protected area

LIST OF DOCUMENTS REVIEWED

Security event logs from April 1, 1996 to June 27, 1997, and 8 security incident reports

Arkansas Nuclear One Procedure 1000.019, "Station Security Requirements," Revision 30

Central alarm station 24-hour historical transaction (computer) record for July 2, 1997

Weekly testing records (April 1996 through June 1997) for: Cardreader doors, turnstiles, hard key doors, multiplexers, gates, and special function cardreaders

Quarterly testing records (April 1996 through June 1997) for: Microwave and e-field perimeter alarms, and CCTV cameras

Weekly testing records (April 1996 through June 1997) for: Microwave, E-field and CCTV from April 1996 to June 1997

Job Orders (April 1996 through June 1997) for the following security equipment: Card readers, CCTV system, explosive detectors, metal detectors, x-ray machines, microwave detectors, e-field detectors, security doors, CAS/SAS multiplexors, and turnstiles

Background investigation records for 12 individuals granted and for 4 individuals denied unescorted access authorization

Audit/Surveillance Reports:

Quality Assurance Surveillance NQ-97-0187, Site Access Control, dated July 10, 1997

Quality Assurance Surveillance SR-021-97, Protected Area, dated May 5, 1997

Quality Assurance Surveillance NQ-97-0105, Access Authorization Control, dated April 29, 1997

Quality Assurance Surveillance SR-020-97; Protected Area Entry, dated April 24, 1997

Quality Assurance Audit QAP-23-97, Security, dated March 5, 1997

Quality Assurance Surveillance, CAS/SAS, dated January 15, 1997

Quality Assurance Audit, FFD and AA, dated October 7, 1996