

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-369 and 50-370  
License Nos: NPF-9 and NPF17

Report Nos.: 50-369/97-13, 50-370/97-13

Licensee: Duke Power Company (DPC)

Facility: McGuire Nuclear Station, Units 1 & 2

Location: 12700 Hagers Ferry Rd.  
Huntersville, NC 28078

Dates: July 21 - 24, 1997

Inspector: W. W. Stansberry, Safeguards Specialist

Approved by: C. Julian, Acting Chief, Special Inspection Branch  
Division of Reactor Safety

## EXECUTIVE SUMMARY

McGuire Nuclear Station, Units 1 and 2  
NRC Inspection Report Nos. 50-369/97-13 and 50-370/97-13

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

### Plant Support

- The licensee's compensatory measures implemented for degraded security equipment and conditions were within the commitments of Physical Security Plan. (S1.1)
- The licensee was storing and securing ammunition and weapons according the licensee's Physical Security Plan and procedures. (S2.8)
- Plan changes, reviewed by the inspector, did not decrease the effectiveness of the Physical Security Plan and the Training and Qualification Plan and was not contrary to regulatory requirements. (S3.1)
- An uncontrolled safeguards information incident was reviewed and found to be a licensee identified, non-repetitive, corrected, non-willful, non-cited violation. (S4.2)
- The security force was being trained in accordance with the Training and Qualification Plan and regulatory requirements. (S5.1)
- Two unresolved items were found pertaining to the access controls for personnel that were contrary to the criteria in Chapter 6 of the Physical Security Plan, Security Procedure EXAO-02, and Nuclear Station Directive 218. One involved repeated incidents of failure to cancel badges of terminated employees. The other involved repeated instances of employees removing badges from the protected area. (S8.1)

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## REPORT DETAILS

### IV. Plant Support

#### **S1 Conduct of Security and Safeguards Activities**

##### **S1.1 Compensatory Measures**

###### **a. Inspection Scope (81700)**

The inspector evaluated the licensee's program for compensatory measures for degraded security equipment. This was to ensure the reliability of the physical protection of vital equipment and security-related devices; and licensee's compliance with the criteria in the Physical Security Plan (PSP).

###### **b. Observations and Findings**

Compensatory measures, which are to equal the failed or damaged component of the security system, were reviewed. These measures consisted of equipment, additional security force personnel and specific procedures to assure that the effectiveness of the security system was not reduced. During this inspection, one compensatory measure of a vital area was in effect. One security officer was posted to provide continuous observation of vital equipment that was removed from a vital area for maintenance purposes. The inspector interviewed two compensatory officers to ensure their proficiency of the duties assigned. The officers interviewed were found to be appropriately trained for their compensatory duties. There were no outstanding workorder requests of regulatory requirements that required compensatory measures.

###### **c. Conclusions**

The licensee's compensatory measures implemented for degraded security equipment and conditions were within the commitments of the PSP. There were no violations found in the area.

#### **S2 STATUS OF SECURITY FACILITIES AND EQUIPMENT**

##### **S2.8 Security Equipment Storage/Armory**

###### **a. Inspection Scope (81700)**

The inspector evaluated the licensee's weapons storage facility to ensure application of the criteria in Chapter 3 of the PSP and Security Procedure EXAO-06, "Weapons/Equipment - Control and Issue," Rev. 30, dated April 30, 1997.

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b. Observations and Findings

The inspector verified that weapons and ammunition not in use were stored in locked and controlled storage locations. This included locked and sealed contingency weapon cabinets. There were two weapon's storage rooms within the protected area. The weapons were stored in locked containers in one of the storage areas. Both areas were monitored by intrusion detection systems

c. Conclusions

The licensee was storing and securing ammunition and weapons according to the licensee's PSP and security procedure. There were no violations of regulatory requirements identified in this area.

**S3 Security and Safeguards Procedures and Documentation**

S3.1 Security Program Plans

a. Inspection Scope (81700)

The inspector reviewed appropriate changes of the licensee's PSP, Revisions 2, 3, 4, and 6, dated December 7, 1995, January 31, 1996, March 15, 1996, and May 13, 1997. The Security Personnel Training and Qualification Plan (T&QP) changes, Revisions 3 and 4, dated March 12, 1997 and June 25, 1997 were also reviewed.

b. Observations and Findings

Review of the changes to the PSP and T&QP reports, verified their compliance to the requirements of 10 CFR 50.54(p). Most of the changes were grammatical, organizational/position/title changes, clarifications, inclusion of new NRC policies and guidance (Vehicle Barrier System), and text conversion. Revision 5 to the PSP (Hand Geometry) was sent to NRC Hqs for the 10 CFR 50.90 review required. Each revision of the Duke Power consolidated PSP and T&QP for their three nuclear power plants has been an improvement. The consolidation was a difficult task to coordinate and negotiate.

c. Conclusions

The random review of plans, records, reports, and interviews with appropriate individuals verified that changes did not decrease the effectiveness of the PSP and T&QP, and were not contrary to regulatory requirements. There were no violations of regulatory requirements noted in this area.

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#### S4 SECURITY AND SAFEGUARDS STAFF KNOWLEDGE AND PERFORMANCE

##### S4.2 Control of Safeguards Information (SGI)

###### a. Inspection Scope (81810)

The inspector reviewed Problem Investigation Process (PIP) 0-M97-1843 pertaining to an optical-magnetic hard drive disk that had not been properly secured. This review was to determine whether Safeguards Information (SGI), as defined in 10 CFR 73.21 and Security Procedure EXAO - 17, "Safeguards Information and Control," Rev. 0, dated July 15, 1996, had been disclosed or compromised.

###### b. Observations and Findings

The licensee's investigation revealed the following:

- Between the hours of 5:00 p.m., April 30, 1997 and 6:20 a.m., May 1, 1997 an optical-magnetic removable hard drive disk was left unsecured in a external optical-magnetic drive of the Safeguards Room Server in the Engineering Safeguards room.
- Personnel conducting the final security inspection of the Engineering Safeguards room failed to insure that all removable hard drives had been secured and all equipment had been turned off prior to securing the room.
- There was no entry into the Engineering Safeguards room during the above time frame.
- No SGI had been accessed during the time the removable hard drive disk was uncontrolled.

The immediate corrective action was the securing of the removable hard drive disk. Intermediate and long term corrective actions were as follows:

- Training was initiated with all security force members and all engineering personnel who frequently need access to the safeguards room.
- A check-off list was developed, listing every electronic device and safeguards container that required end-of-the-day closure.
- All safeguards drives had a 2-3 foot long, 3 inch wide red ribbon attached to identify uncontrolled/unsecured safeguards storage devices outside the security containers.

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Security Procedure EXAO -17, in section III B.4.a., states, "SGI material shall be returned to the appropriate storage cabinet/container prior to the end of a work shift." This non-repetitive, licensee-identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy (NCV 50-369/97-13-01, 50-370/97-13-01).

c. Conclusion

This incident of failure to properly secure safeguards information was a licensee identified, non-repetitive, corrected, non-willful event. Consequently, a Non-Cited Violation was issued.

**S5 SECURITY SAFEGUARDS STAFF TRAINING AND QUALIFICATION**

S5.1 Security Training and Qualification

a. Inspection Scope (81700)

The inspector reviewed the security training and qualification program to ensure that the criteria in the Security Personnel T&QP were met.

b. Observation and Findings

The inspector interviewed eight security non-supervisor personnel, four supervisors, and witnessed approximately 15 other security personnel in the performance of their duties. Members of the security force were knowledgeable in their responsibilities, plan commitments and procedures. Eleven randomly selected training records were reviewed by the inspector concerning training, firearms, testing, job/task performance and requalification.

The inspector found that armed response personnel had been instructed in the use of deadly force as required by 10 CFR Part 73. Members of the security organization were requalified at least every twelve months in the performance of their assigned tasks, both normal and contingency. This included the conduct of physical exercise requirements and the completion of the firearms course. The licensee had an onsite security organization, including adequately trained and qualified security force members according to the licensee's T&QP and the Safeguards Contingency Plan. Eleven security personnel training and qualification records were reviewed. Through this review and interview with security force personnel, the inspector found that the requirements of 10 CFR 73, Appendix B, Section 1.F, concerning suitability, physical and mental qualification data, test results and other proficiency requirements were met.

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c. Conclusion

The security force was being trained according to the T&QP and regulatory requirements. There were no violations of regulatory requirements identified in this area.

**S8 MISCELLANEOUS SECURITY AND SAFEGUARDS ISSUES**

S8.1 Protected Area Access Control

a. Inspection Scope (71750)

The inspector evaluated the licensee's program to control access of personnel to the protected and vital areas according to criteria in Chapter 6 of the PSP and appropriate directives and procedures.

b. Observation and Findings

This was to ensure that the licensee had positive access controls of personnel entering and exiting the protected area. During a review of entries in the Safeguards Event Log and numerous PIPs, the inspector noted that a significant number of protected area badges of terminated personnel were not being deactivated in a timely manner. Also found was a significant number of protected area badges were not being returned to security prior to exiting the protected area.

The inspector found seven examples of protected area badges not being deactivated and/or made unavailable to terminated employees. These examples involved 10 employees, with four instances of gaining access to the protected area after they were terminated from employment and unauthorized to access the protected area. None of the four individuals accessed any vital areas. Two events were caused by security personnel and five events were caused by contractors/vendors. Dates of the events range from April 19, 1996 to July 8, 1997. Each event was licensee identified and not willful. However, the events were a repetitive issue that could reasonably have been prevented by the licensee's corrective action for previous licensee findings that occurred within the past two years. The corrective actions were prompt; however, not comprehensive and effective to prevent recurrence. The licensee's analysis and corrective actions of the seven events were documented in the following PIPs: 0-M96-1056, 0-M97-1481, 0-M97-1541, 0-M97-2246, 0-M97-2584, 0-M97-2617, and 0-M97-2820. The cause of the events were programmatic, as well as human error, in that the PSP, security procedure, and Nuclear Station Directive did not provide specific guidance or commitment to the timeliness of notification of termination to security or the actions by security to deny/remove the terminated individuals access to the protected area. These events appear to be in violation of the following licensee and regulatory requirements:

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- 10 CFR 73.55 (d)(7)(i)(C) states to the effect that the licensee revoke and retrieve the access identification badge prior to or simultaneously with the notification of an individual being informed of their termination of employment.
- Nuclear Policy Manual-Volume 2, Nuclear Station Directive 218, "Notification Responsibilities for Termination," paragraph B.1, Rev. 0, dated June 27, 1996 states in effect that for voluntary and involuntary termination, that management shall be responsible for verbally notifying site security to delete the terminated individuals badge.
- Security Procedure EXAO-02, "Security Badge Program," , Rev. 62, dated April 30, 1997:
  - Paragraph III.B.8c states to the effect that if termination is unfavorable, Security shall be contacted.
  - Paragraph III B.8e(2) states to the effect that Security badges shall be removed from storage when security is informed of a person's termination.

Because of the repetitiveness, ineffective corrective action, programmatic issues and the violation of the above references, this issue is being identified as an unresolved item pending further NRC review (50-369/97-13-02, 50-370/97-13-02).

The inspector found ten examples of protected area badges exiting the protected area, uncontrolled. These examples were in violation of the following:

- 10 CFR 73.55 (d)(8) states to the effect that access control devices used to control access to protected and vital areas must be controlled to reduce the probability of compromise.
- Duke Power Company Nuclear Security and Contingency Plan, Rev. 6, dated May 13, 1997, Chapter 6, "Access", Paragraph 6.3 states to the effect that protected area badges shall remain within the protected area.
- Security Procedure EXAO-2, Paragraph III.B.5.c states to the effect that prior to exiting the protected area, all badges shall be returned to the exit turnstile at the primary access portal.

Dates of the events ranged from February 5, 1997 to July 10, 1997. Each event was licensee identified and not willful. However, the events were a repetitive issue that could reasonably have been prevented by the licensee's corrective action for previous licensee findings that occurred within the past two years. The corrective actions were prompt; however, not comprehensive and effective to prevent recurrence. The licensee's analysis and corrective actions of the ten events were documented in the following PIPs: 0-M97-0431, 0-M97-0452, 0-M97-0561, 0-M97-0748, 0-M97-1232,

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0-M97-1430, 0-M97-1448, 0-M97-1628, 0-M97-1756, 0-M97-2640. The cause of the events were programmatic, as well as human error, in that the PSP and security procedure did not provide specific guidance to where or to whom the security badges were to be returned upon exiting the protected area.

Because of the repetitiveness, ineffective corrective action, programmatic issues and the potential violation of the above references, this issue is being identified as an unresolved item pending further NRC review (50-369/97-13-03, 50-370/97-13-03).

c. Conclusion

This evaluation found two potential violations of the access controls for personnel that were contrary to the criteria in Chapter 6 of the PSP, Security Procedure EXAO-02, and Nuclear Station Directive 218.

### V. Management Meeting

X1 **Exit Meeting Summary**

The inspector presented the inspection results to licensee management at the conclusion of the inspection on July 24, 1997. 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

B. Barron, Vice President, McGuire Nuclear Station  
 R. Birmingham, Human Resource Manager  
 S. Copp, Regulatory Affairs  
 R. Cross, Regulatory Compliance, Technical Specialist  
 W. Evans, Security Manager  
 V. Owen, Regulatory Compliance  
 S. Sellers, Security Technical Specialist

NRC

M. Sykes, Acting Senior Resident Inspector

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## INSPECTION PROCEDURES USED

IP 71750: Plant Support Activities  
IP 81700: Physical Security Program for Power Reactors  
IP 81810: Protection of Safeguards Information

## ITEMS OPENED, CLOSED, AND DISCUSSED

OPENED

50-369, 370/97-13-01	NCV	Removable hard drive containing Safeguards Information found uncontrolled.
50-369, 370/97-13-02	URI	The licensee failed to deactivate and/or deny protected area access to terminated employees.
50-369, 370/97-13-03	URI	The licensee failed to control protected area access badges, in that the badge were taken outside the protected area unescorted by security personnel.

CLOSED

50-369, 370/97-13-01	NCV	Removable hard drive containing Safeguards Information found uncontrolled.
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