U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-346
License No:	NPF-3
Report No:	50-346/99017(DRS)
Licensee:	First Energy Nuclear Operating Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5503 N. State Route 2 Oak Harbor, OH 42449
Dates:	September 28 - October 1, 1999
Inspector:	James L. Belanger, Senior Physical Security Inspector
Approved by:	James R. Creed, Safeguards Program Manager Division of Reactor Safety

EXECUTIVE SUMMARY

Davis-Besse Nuclear Power Station
NRC Inspection Report 50-346/99017(DRS)

This routine, announced physical security inspection assessed the effectiveness of the licensee's program for physical protection. Specifically, the inspector evaluated the implementation of the licensee's protected area ingress search program, the maintenance support for security systems, alarm stations and communications, quality assurance and self assessment in security activities, and a review of previous inspection findings. Within these areas, the following conclusions were made:

Plant Support

- Maintenance programs supporting the security system were efficiently implemented. Repair of security related equipment was both timely and effective. (Section S2.1)

- A minor violation was identified with performance of the daily walk-through metal detector. Management adequately addressed this problem by providing a clarification to existing procedural requirements. (Section S2.2)

- The inspector identified two plan commitments that require clarification to ensure accuracy with actual systems in the field. The licensee initiated draft security plan changes to be submitted under the requirements of 10 CFR 50.54(p). (Section S3.1)

Report Details

IV. Plant Support

S2 Status of Security Facilities and Equipment

S2.1 Maintenance Support for Security Systems

a. Inspection Scope (81700)

The inspector reviewed the implementation of maintenance programs supporting the security equipment described in the licensee's approved security plan. The inspector observed the performance of search equipment, protected area detection and surveillance systems, and alarm station equipment. The inspector also reviewed completed Maintenance Log Sheets for the period of January 1, 1999 through September 21, 1999.

b. Observations and Findings

The inspector noted during tours of plant security areas that the aforementioned security equipment was operable and effective. No compensatory measures were required. Maintenance tracking log sheets for 1999 showed that most maintenance work requests were completed by technical personnel in one to two days. Interviews with randomly selected security force personnel indicated that maintenance support was very good. During the course of the inspection, the inspector observed frequent communication between the security staff and the maintenance staff on current issues affecting security systems.

c. Conclusions

Maintenance support for security systems was effective. Security and technical personnel communicated well on ongoing security equipment issues.

S2.2 Discrepancy in Metal Detector Testing Procedure

a. Inspection Scope (81700)

The inspector observed the performance tests of the ingress search equipment in the main access ingress facility. The inspector reviewed the licensee's testing procedures for the search equipment.

b. Observations and Findings

A member of the instrumentation and control group conducted tests of metal detectors, explosive detectors, and x-ray machines in accordance with established procedures. One discrepancy was noted in the conduct of the metal detector testing which demonstrated a need for additional clarification in the testing procedure. Section 11.3 of the Davis Besse approved security plan required that metal detectors be tested and

maintained in accordance with established procedures. The procedure, IS-DP-04002, Revision 3, "Performance Test for the Walk-Through Metal Detector," required that the tester remove metal objects from his/her person. The significance of removing metal objects from the person was to ensure that the detector meets the specific minimum test standards. Any additional metal on the tester could affect the tests results, i.e, the detection of a mass of metal above the minimum standard level. The inspector observed that the tester removed all metal from his person except for his steel-toed safety shoes in which he performed the test using the prescribed test standard. The technician stated that he normally conducted such tests with his safety shoes on. The inspector questioned this practice with the Operations Security Supervisor who stated that he was unaware that the tests were conducted with safety shoes being worn. The Operations Security Supervisor issued a memo to all security supervisors clarifying that the removal of metal objects test prerequisite included, but not limited to, chains, watches, coins, keys, belt buckles, and steel-toed safety shoes. This action adequately addressed the inspector 's concern. This failure constitutes a violation of minor significance and is not subject to formal enforcement action.

c. Conclusions

The technician who conducted a performance test of the metal detector did not comply with the established procedure to remove all metal from his person prior to conducting the test. Security management was unaware that steel-toed shoes were worn during the conduct of such tests and adequately addressed this issue by clarifying the requirement. This failure constituted a violation of minor significance and is not subject to formal enforcement action.

S3 Security and Safeguards Procedures and Documentation

S3.1 Security Program Plans

a. Inspection Scope (81700)

The inspector reviewed the security plan commitments in the areas inspected to determine that plan commitments were consistent with actual equipment and practices.

b. Observations and Findings

The inspector identified two minor inconsistencies between the security plan and actual protective practice. The first area related to the vehicle barrier system. One vehicle barrier gate in the system was not identified as an active barrier. This specific vehicle barrier was the subject of a previously unresolved item. NRC determined that this specific gate was an active barrier. Consequently, the licensee needed to revise the security plan to identify this vehicle gate as an active barrier in the security plan description of the vehicle barrier system. Prior to the conclusion of the inspection, the licensee initiated a revision that identified this gate as an active barrier. Following the onsite review process, the change will be submitted to the NRC under the provisions of 10 CFR 50.54(p).

The second change involved the physical description of the detection and surveillance system associated with a building on the protected area perimeter. The description in the plan was unclear. The licensee agreed that the description in the plan should be changed to clarify the detection and surveillance capabilities associated with this building. The change is administrative in nature and will not change the existing capabilities. Prior to the conclusion of the inspection, this change was added to a proposed plan revision that will be submitted to the NRC under the provisions of 10 CFR 50.54(p).

c. Conclusions

Two areas of the security plan require clarification to accurately describe the vehicle barrier system and the detection and surveillance systems associated with a building that formed part of the protected area barrier. Revisions to effect these changes were initiated during the inspection.

S4 Security Force Knowledge and Performance

S4.1 Overall Security Force Performance was Good

a. Inspection Scope (81700)

Members of the security organization, to include principal staff and security force members were interviewed by the inspector regarding their responsibilities. Safeguards event logs were reviewed concerning performance. The inspector observed protected area access controls, alarm station operations, and response positions.

b. Observations and Findings

The review of security loggable events from January 1, 1999 to the present showed one negative event related to security force performance. This event occurred in January 1999 and involved a security officer found inattentive on post. No violation of NRC requirements occurred because the compensatory measures were not required by security plan commitments. A review of management's corrective actions regarding this incident indicated that it was properly evaluated.

The review of loggable events also identified a incident involving a security officer who discovered an undeclared weapon on May 10, 1999 during an inbound vehicle search. The officer's actions prevented the introduction of the weapon into the protected area. The licensee determined through interviews that there was no malevolent intent on the part of the driver involved.

During the inspection, the inspector toured various security posts including ingress search, alarm station operations, and armed responder positions. Officers interviewed by the inspector were knowledgeable, experienced, and performed their duties in a professional and exemplary manner.

c. Conclusions

The inspector concluded that the overall performance of the security organization was effective. One example of inadequate performance, i.e. an inattentive officer, was an isolated occurrence. Security officers interviewed were professional and knowledgeable.

S6 Security Organization and Administration

S6.1 Management Support: Security Data Management System

a. Inspection Scope (81700)

The inspector reviewed the implementation status of the ongoing computer replacement program. Interviews were conducted with the Operations Security Supervisor and the Security Director. The inspector also viewed the ongoing construction of the new central alarm station and was briefed on the new security computer custom design graphics.

b. Observations and Findings

Interviews with the security management indicated that the computer replacement program had an expected completion date of November 1, 1999. Work activities were clearly focused and prioritized and the remaining work was approximately 90% complete.

The inspector attended a working status meeting that involved key personnel associated with program implementation. The purpose of the meeting was the communication and coordination of work activities and issues affecting the program. The inspector observed that the security group and the various plant organizations involved in the implementation of the program effectively communicated on current issues. The inspector noted that the licensee dedicated resources to the project.

A security engineer briefed the inspector on the capabilities of the new security computer system. The inspector noted that the custom designed computer graphics were user friendly, innovative, and significantly assisted console operators and support technicians in their work.

c. Conclusions

Management and staff support for the security computer replacement project was effective.

S7 Quality Assurance in Security and Safeguards Activities

Si7.1 Audits and Assessments

a. Inspection Scope (81700)

The inspector reviewed the licensee's quality assessment activities to assess its ability to identify and correct problems related to physical security. The inspector reviewed reports for audits and assessments conducted in 1999 to date.

b. Observations and Findings

The inspector reviewed audit and self-assessment activities related to physical security performance that took place since January 1, 1999. Activities included a QA audit of the Access Authorization and Fitness-for-Duty Programs completed in July 1999, a QA audit of the nuclear security program completed in February 1999, and five self-assessments in 1999 performed by the security department of the Maintenance of Safeguard's Procedure Manuals, security training documentation, implementation of the corrective action process, controlled computer software.

The inspector's review disclosed that the audit activities were conducted at the required frequencies and in accordance with station procedures and included performance based evaluations of personnel and vehicle access controls, testing of security equipment, observation of shift turnovers, walkdowns of isolation zones, protected and vital area boundaries. The scope of the QA audits were sufficient to assess the areas reviewed, and findings added value to the licensee's program. In particular, the finding that one of the personnel searches was inadequate which was a repeat finding from a previous audit. Based on this problem, increased supervision of this activity was initiated in addition to an increasing the frequency of conducting Supervisor Tour 53, Monitoring of a Contraband Search. QA conducted two follow up unannounced drills using the tour 53 format. Both drills were successful in that the officer at the search identified the contraband.

The inspector verified that Audit Finding Reports (AFR) were issued to document findings and to track resolution and that the security staff adequately reviewed the identified issues.

c. Conclusions

The audit and self-assessment programs for physical security, access authorization, and fitness for duty programs were effectively implemented. Audit and self-assessment activities were properly focused, were of sufficient scope and depth to assess program performance, and identified problems were placed into the licensee's corrective action system for resolution.

S8 Miscellaneous Security and Safeguards Issues

S8.1 (Closed) Violation 50-346/98008-01: Failure to provide some of the required information for background investigation evaluations. Unescorted access to the protected area was granted to two security officers without all required elements of employment history being provided by the licensee or evaluated. Additionally, for an indeterminate period of time, the licensee failed to make personnel information available to other licensees and contractors authorized to receive such information.

The licensee revised their "Employment Verification and Suitable Inquiry" policy on August 31, 1998 to require the release of such information. The inspector reviewed the background investigation files of three individuals granted access subsequent to this inspection and concluded that the licensee's corrective actions had been appropriate.

S8.2 (Closed) Inspection Follow-Up Item 50-346/98008-02: Documentation of the suitable inquiry did not indicate what portion(s) of the suitable inquiry constituted an unsatisfactory evaluation. The licensee developed, implemented, and trained the appropriate personnel in a method for adequately documenting the completion of suitable inquiries. The inspector reviewed the documentation of three suitable inquiries conducted since the inspection and concluded that the licensees corrective actions had been appropriate.

S8.3 (Closed) Inspection Follow-up Item 50-346/98008-03: Some material exempt from search was not included in the security plan. The security staff agreed to revise the security plan to address this category of exempted material and the protective measures used for such material.

Interviews with the security staff showed that they elected not to include this category of exempt material in their program. Consequently , a revision to their security plan was not appropriate.

S8.4 Inspection Follow-Up Item 50-346/98008-04: An additional component was required to provide adequate protection for a vehicle gate that formed part of the vehicle barrier system.

An interview with the Supervisor, Security Support indicated that the component has been received and that he anticipated installation to be completed by the end of October 1999. Compensatory measures for the lack of the component have continued. This item will remain open pending installation of the component.

S8.5 (Closed) Inspection Follow-Up Item 50-346/97005-01: Actions required for Operational Safeguards Response Evaluation to include Operations review and approval of target sets, procedure/plan revision/development, installation of delay mechanisms/barriers, conduct of drills and training.

The inspector verified through discussions with the Supervisor, Security Support that these issues were completed prior to the June 1998 scheduled OSRE which was subsequently canceled due to severe weather and rescheduled for March 2000.

S8.6 (Closed) Inspection Follow-Up Item 50-346/97005-02: Continued reliability of the security computer system, maintenance support for the system, and the availability of parts and components. This issue was adequately addressed through the installation of a new security computer system. The inspector observed that the new system was operable and effective.

V. Management Meetings

XI Exit Meeting Summary

The inspector presented the inspection results to licensee management at the conclusion of the onsite inspection on October 1, 1999. 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

T. Chambers, Supervisor, Quality Assurance
R. Coad, Manager Operations
C. Detray, Auditor, Quality Assurance
D. Eshelman, Manager Plant Engineering
S. Filipucci, Supervisor, Security
L. Hannan, Security Analyst
H. Rhubright, QA Auditor
J. Rogers, Manager, Maintenance
A. Schumacher, Supervisor, Security Support
G. Skeel, Manager, Security
G. Wolf, Engineer, Licensing, Regulatory Affairs

NRC

K. Zellers, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 81700 Physical Security at Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

50-346/98008-01	VIO	Background Investigation
50-346/98008-02	IFI	Background Investigation Documentation
50-346/98008-03	IFI	Material Searches
50-346/97005-01	IFI	Contingency Actions
50-346/97005-02	IFI	Security Computer

Discussed

50-346/98008-04	IFI	VBS Barrier

LIST OF ACRONYMS USED

AFR	Audit Finding Report
CFR	Code of Federal Regulation
DRS	Division of Reactor Safety
IFI	Inspection Follow up Item
OSRE	Operational Safeguards Response Evaluation
QA	Quality Assurance
SDMS	Security Data Management System
VBS	Vehicle Barrier System
VIO	Violation

PARTIAL LIST OF DOCUMENTS REVIEWED

Maintenance Log Sheet Report (January 1, 1999 - September 21, 1999)

Procedure: IS-DP-04002, Rev 2, "Operational Test for WalkThrough Metal Detector"

Memorandum dated 9/30/99 from James A. Gorman to Supervisors, Subject: IS-DP-04002 - Performance Test for the WalkThrough Metal Detector

Quality Assurance Audit Report AR-99-SECUR-02 dated September 3, 1999

Quality Assurance Audit Report AR-99-SECUR-01 dated March 17, 1999

Self-Assessment 99-001/Maintenance of Safeguards Procedure Manuals

Evaluation 99-02/Controlled Software

Evaluation 99-03/Security Training Documentation

Evaluation 99-04/Controlled Software

Self Assessment 1999-0107/Corrective Actions

Security Event Logs (January 1, 1999 to September 30, 1999