

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-341  
License No: NPF-43

Report No: 50-341/96015(DRS)

Licensee: Detroit Edison Company (DECo)

Facility: Enrico Fermi, Unit 2

Location: 6400 N. Dixie Highway  
Newport, MI 48166

Dates: December 2, 1996 through February 7, 1997

Inspectors: G. Pirtle, Physical Security Inspector  
J. Creed, Chief, Plant Support Branch 1

Approved by: James R. Creed, Chief, Plant Support Branch 1  
Division of Reactor Safety

## EXECUTIVE SUMMARY

Enrico Fermi, Unit 2  
NRC Inspection Report 50-341/96015

This inspection included a review of the physical security program performance. It was an announced inspection and included two site visits conducted by a regional security specialist, assisted on one visit by a Branch Chief, and in-office document reviews.

- The security force low morale and decreased level of performance (previously identified through NRC, QA and licensee self-identified efforts) represent precursors to potentially significant problems. These challenges to performance have continued for some time and it appeared that your staff had begun to take actions to solve these problems.
- A concerted effort had been made to self-identify the depth and scope of the security force problems and to develop a plan to address corrective actions. We noted, however, that the Security Force Excellence Plan (SFEP) lacked evaluation criteria against which progress can be measured in some areas.
- Security management had begun to improve communications within the security organization and had initiated measures to alleviate problems caused by high turnover within the security force.
- Our inspection effort independently identified other issues that further demonstrate the need to resolve the challenges mentioned above so more management attention can be devoted to security program implementation.
- A violation was identified for failing to adhere to a requirement for background investigations for contract security officers (Section S5).
- Two Unresolved Items were identified pertaining to: (1) protective measures for certain plant equipment; and (2) review of results for corrective action effectiveness in reference to security force physical examinations (Sections S2 and S5).
- Inspection Followup Items were identified relative to: (1) lack of procedures for two security related functions; (2) the lack of measurement standards for some goals in the SFEP; and (3) NRC monitoring the attainment of self-identified goals in certain areas of the SFEP (Sections S1 and S3).
- Self assessment by the Quality Assurance Department continued to be effective in identifying the decline in effectiveness in some aspects of the security organization (Section S7).
- Security force participation in the Deviation Event Report (DER) program had increased significantly within the past six months. Problems appeared to be surfacing to licensee management attention (Section S7).

## Report Details

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

#### **a. Inspection Scope (81020 & 81022)**

The inspectors reviewed licensee audit reports, minutes of security issue meetings, the Security Force Excellence Plan (SFEP), and other documents that identified present security issues and performance trends being addressed by security management. Additionally, approximately 60 security force members, supervisors, and a counselor from the Employee Assistance Program (EAP) were interviewed.

#### **a. Observations and Findings**

The security department staff has identified several concerns pertaining to program management. These concerns included issues identified by security force members, a counselor of the Employee Assistance Program (EAP), the Quality Assurance (QA) department, meetings with security force members, and NRC identified issues. The issues appeared to be consistent and each commenter tended to support the findings of other entities involved in the process. Security management had concluded that the findings need to be addressed and resolved in as timely a fashion as possible.

The self-identification effort concluded that security force morale was extremely low, management had suffered from a significant mistrust from security force members, and had a credibility problem among a large percentage of the security force. Security force performance had not significantly improved since the last routine inspection conducted in August, 1996 (See Section S8.1 for related information).

The recent (within past eight months) turnover rate for licensee and contractor security force members has been higher than security management's ability to effectively cope with and counter. Since August 1996, approximately 25% of contractor and licensee security personnel have left the organization. Training of replacement personnel has barely kept pace with departures and the experience level of the security force continues to decrease because of the turnover.

Overhead support positions (Training and Access Authorization) lacked depth and both sections have had or will assume significant increases in workload. The Access Authorization Section was in the process of completing background investigations for several hundred personnel granted temporary access authorizations during the recent outage. Contractor support was being provided to assist in this significant task. The training department was recently tasked to cope with a significant increase in the training of newly hired contractor security personnel. Alternatives to support the training section in this effort, such as acquiring additional trainers, were being actively pursued by licensee management. Additionally, several supervisory positions (to include two of three Section Chiefs) have been filled by personnel on an "acting" basis for extended periods of time, in

one case exceeding one year. Management communication problems were identified as a significant contributor to many of the issues that have surfaced. Although the decision to convert part of the security force to contractor personnel has caused the most vocal and passionate responses, the management weaknesses identified above went beyond this single issue.

Collectively, the issues identified above have caused significant concern regarding the security force's potential inability to perform adequately and the potential that security management may become less capable to control and resolve such issues.

On January 13, 1997, the Director, Nuclear Security issued a Security Force Excellence Plan (SFEP) which identified seven goals to address the issues identified above and other issues (communications, morale, experience/training, turnover, overtime, performance, and management credibility). Review of the SFEP disclosed that methods or standards to measure effectiveness of goal attainment had not been identified for four of the seven goals. Additionally, in some cases, the standards were not scheduled to be developed until March 30, 1997 (up to three months after plan implementation). The timetable for development of the measurement standards for goal attainment was weak.

Although the identified goals appeared to be appropriate to attempt to resolve the issues, the lack of identification of the measurement standards to determine goal attainment prevents a meaningful evaluation of the SFEP's potential to achieve significant improvements. Timely development of measurement standards for SFEP goal attainment will be monitored as an Inspection Followup Item (50-341/96015-01).

Our emphasis on performance as a key indicator of successful progress for resolution of many of the above issues will be through monitoring licensee identified goal attainment as addressed in the SFEP for the areas of experience/training, turnover, and performance. Security management's ability to attain those goals has yet to be determined. This will be an Inspection Followup Item (50-341/96015-02).

c. Conclusions

Several management weaknesses have been self-identified by the licensee and confirmed by our extensive interviews with security force personnel. The Security Force Excellence Plan addresses the major issues to resolve the weaknesses. However, methodology to determine SFEP goal attainment have not yet been developed. Performance-related SFEP goal attainment in the areas of performance, experience/training, and turnover of personnel will be monitored.

## **S2 Status of Security Facilities and Equipment**

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

The inspectors reviewed the condition of security equipment and facilities required by the security plan. The equipment observed included, but was not limited to, search equipment, intrusion alarm equipment, alarm assessment equipment, and equipment within the security alarm stations. Facilities observed included the Primary Access Portal, and both alarm stations.

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

The security force has been taking compensatory actions for some cable trays containing safety-related cables. The cable trays are located in close proximity to each other (about 10 to 25 feet) between two vital area walls and are technically within the protected area of the plant. Although some of the cable trays contain safety-related cables, the cables are not marked to show which cables power what equipment. Whether the portion of the cable trays between the two vital area walls need to be considered as vital equipment is an Unresolved Item (50-341/PS016-03).

Security equipment observed during the inspection functioned as designed and compensatory measures were implemented when appropriate. Maintenance support for security equipment was adequate.

### **c. Conclusions**

The need for compensatory measures for some safety related cables not located within vital areas will be evaluated and resolved by the NRC. Security equipment performed well and was adequately maintained.

## **S3 Security and Safeguards Procedures and Documentation**

### **a. Inspection Scope (81020 & 81022)**

The inspectors reviewed selected procedures pertaining to the areas inspected and also reviewed appropriate logs, records, and other documents.

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

During the inspection an incident occurred in which a security officer exchanged a shotgun on post and did not have the required amount of ammunition with the weapon. This situation continued for several hours before it was noted. Further discussions with security force members also disclosed that on two or three occasions, rifle magazines were found inserted while the weapons were within the security force armory. Followup on these issues showed that security force management had not prepared a procedure for the control, handling, issue, accountability, and safe loading and unloading of firearms. Although most of these



subjects were covered during the training process, a procedure for security force members ready reference, clearly delineating management's expectations in this important area of safety was not available. The Director, Nuclear Security agreed that such a procedure was appropriate and committed to complete the procedure.

Section 1.2.7 of the licensee's security plan addressed mutual assistance capabilities established between the Fermi site and two other site security forces. Interviews with the Director, Nuclear Security showed that no procedure had been prepared to address the processing, control, training, and certification required before members of the mutual assistance forces could meet site specific requirements to perform security duties at the Fermi plant under the criteria of the Fermi security plan. The Director, Nuclear Security committed to prepare a procedure that addresses the above issues for the mutual assistance security force personnel. It should be noted that the assistance forces have not been deployed to the Fermi site since the mutual assistance agreement has been in force (about three years). Therefore, this concern is primarily an administrative and planning issue.

The procedure weaknesses noted above pertaining to: (1) issue, control, accountability, and handling of firearms; and (2) processing of mutual assistance security force personnel will be an Inspection Followup Item (50-341/096015-04). Other procedures reviewed were well written, adequately describing the functions addressed. The security department had begun to include end users of procedures in the procedure review process.

c. Conclusions

Lack of procedures for use and control of firearms, and disposition and training of mutual assistance forces was identified. Other procedures reviewed were well written and adequate to describe the functions addressed. A proactive action initiated by the security department is to include the end users of procedures as part of the procedure review process.

**S5 Security and Safeguards Staff Training and Qualification**

a. Inspection Scope (81501)

The inspectors toured various security posts and observed performance of duties. Interviews with approximately 60 security force personnel were conducted to determine if the officers were knowledgeable of post requirements. Security event logs and other records pertaining to security force performance were also reviewed.

b. Observations and Findings

During review of eight randomly selected background investigation files for security officers, we observed in five of the files that the employment verification status of the applicants was provided by Stanley Smith Security and accepted by the licensee as part of the background screening process prior to the date the written consent forms to initiate background investigations were completed by the

individuals involved. This constitutes a violation of Section 3.1 of the licensee's security plan which requires all personnel needing unescorted access to the protected area of Fermi 2 to satisfy the requirements of 10 CFR 73.56 and commits to implementing U.S. Nuclear Regulatory Commission, Regulatory Guide 5.66, "Access Authorization Program for Nuclear Power Plants" (dated June 1991). Section 6.1 of the Appendix to NRC Regulatory Guide 5.66 states in part "No element of the access authorization program may be initiated without the knowledge and written consent of the person who is subject to the program" (50-341/96015-05).

Licensee security representatives have advised the security contractor not to provide information for background investigation purposes until after written consent has been obtained. Staff within the licensee's access authorization section have been briefed to be more sensitive to reviewing documents provided for background investigation purposes to assure that the written consent for such information has been completed. Based upon these actions, a written response to the Notice of Violation will not be requested.

Section 3.1.2 of the licensee's Security Force Training and Qualification (SFT&Q) Plan requires security force members who carry firearms to have an annual physical examination completed. Part of the annual examination is to include a test for glaucoma. The licensee recently identified the fact that approximately 30 (and possibly more) security force members requiring the annual physical examinations did not have a glaucoma test completed. All security officers tested since the deficiency was noted (January 1997) were physically qualified to perform their duties.

The Detroit Edison Company Medical Department had recently assumed responsibility for conducting physical examinations for the security force. The medical department personnel involved in the examination process were unaware of the requirement to test for glaucoma. This issue appeared to be a programmatic weakness rather than an isolated incident. Due to the recent identification of the issue, the licensee had not completed their evaluation of the cause for the deficiency, or identified corrective actions to prevent recurrence. For these reasons, the concern will be monitored as an Unresolved Item (50-341/96015-06).

c. Conclusions

A Violation was identified for accepting background investigation information before signed consent forms were completed. An unresolved item was identified because a required element of the security force personnel physical examination was not being completed. Personnel observed while on post were knowledgeable of their duties. No performance errors were noted during tours of security posts.

**S7 Quality Assurance in Security and Safeguards Activities**

a. Inspection Scope (81700)

The inspectors reviewed recent audit reports of the security program and other programs used by the security department for problem identification and correction.

b. Observation and Findings

The audit of the Security, Safeguards Information, and Access Authorization Program (Audit 96-0120, conducted between May 28 and June 14, 1996) identified six deficiencies in which Deviation Event Report (DERs) were written and one observation not requiring a DER. Additionally, the audit determined the security training program to be "ineffective" because of a "repetitive trend of training deficiencies and the inability to implement corrective actions." The audit of the Fitness-For-Duty Program (Audit 96-0137, conducted between September 16 and October 4, 1996) identified seven findings for which DERs were written and one observation not requiring a DER.

Security participation in the DER program had improved significantly during the second half of 1996. During the first half of 1996, approximately 10 DERs were issued for security related concerns. For the second half of 1996, approximately 47 DERs had been issued for security related concerns. Factors contributing to the increased use of DERs include: the Security Department's threshold for initiating DERs has decreased within the past six months; the DER program had become a more viable element of the department's self assessment program, and QA had been reviewing security incidents during audits to determine if such incidents reach the threshold for submission of a DER. During interviews with security force personnel, there appeared to be no reluctance to prepare a DER if a safety or security issue was identified that warranted submission of a DER.

c. Conclusions

Quality Assurance Department audits and surveillances of the security program were thorough, identified problems in the areas audited, and were well documented. The audit program has provided good oversight and identified existing problems. Security participation in the Deviation Event Report program had increased significantly within the past six months.

**S8 Miscellaneous Security and Safeguards Issues**

- S8.1 (Open) Inspection Followup Item No. 50-341/96008-02: Increase in security force errors. For the year of 1995, 27 security incidents were caused by security force errors. In the first six months of 1996, 23 incidents were attributed to security force errors. During the last six months of 1996, 23 more incidents (18 of which were loggable security incidents) were attributed to security force error. Security force error events statistics have remained fairly consistent during the past year.



The number of errors caused by the security force has not shown improvement within the past six months. This item will remain open.

#### V. Management Meetings

##### **X1 Exit Meeting Summary**

The inspector presented the inspection results to members of the licensee management at the conclusion of the onsite inspection on January 24, 1997. The licensee acknowledged the findings presented. Actions agreed to by the security staff to address the inspection findings were discussed during the exit meeting.

The inspector asked the licensee personnel present if the inspection findings discussed during the exit meeting should be considered as proprietary or safeguards information. No proprietary or safeguards information was identified.

Subsequent to the onsite exit meeting, licensee personnel were advised on February 5, 1997 that an Inspection Followup Item would be added pertaining to achieving certain Security Force Excellence Plan goals (Refer to Section S1 for related information).

## PARTIAL LIST OF PERSONS CONTACTED

### Licensee

C. Deardoff, Site Manager, Stanley Smith Security  
\*P. Fessler, Plant Manager  
\*D. Gipson, Senior Vice President, Nuclear Generation  
\*A. Hickman, Ombudsman  
C. Jefferson, Counselor, Employee Assistance Program  
\*J. Korte, Director, Nuclear Security  
\*A. Kowalczyk, Manager, Nuclear Support  
J. Louwers, QA Specialist  
\*R. McKeon, Assistant Vice President, Operations  
\*J. Milton, Acting General Supervisor for Security Operations  
\*B. O'Connor, Manager, Nuclear Assessment  
\*N. Peterson, Supervisor Compliance  
\*W. Romberg, Assistant Vice President, Technical  
\*T. Stack, Supervisor, Security Operations Support

\* Denotes personnel present during the January 24, 1997 Exit Briefing

In addition to the key personnel noted above, approximately 60 security force members from all shift assignments were interviewed during the onsite inspections between December 2, 1996 and January 24, 1997.

## INSPECTION PROCEDURES USED

IP 81020	Management Effectiveness - Security Program
IP 81022	Security Organization
IP 81501	Personnel Training and Qualification - General Requirements
IP 81700	Physical Security Program For Power Reactors

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

50-341/96015-01	IFI	Several Measurement Standards For Security Force Excellence Plan Have not Been Developed
50-341/96015-02	IFI	NRC Monitoring of Certain Security Force Excellence Plan Goals
50-341/96015-03	URI	Compensatory Measures for Cable Trays Located Outside of a Vital Area

50-341/96015-04	IFI	Procedures Were Not Prepared For Two Important Security Functions
50-341/96015-05	VIO	Receipt of Background Investigation Information Before completion of Written Consent Forms
50-341/96015-06	URI	Required Element of Security Force Physical Examination Was Not Completed

Closed

50-341/96015-05	VIO	Receipt of Background Investigation Information Before completion of Written Consent Forms
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Discussed

50-341/96008-02	IFI	Increased Errors Caused by the Security Force
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**LIST OF ACRONYMS USED**

DER	Deviation Event Report
EAP	Employee Assistance Program
IFI	Inspection Followup Item
QA	Quality Assurance
RFM	Response Force Member
SFEP	Security Force Excellence Plan
SFT&Q	Security Force Training and Qualification
URI	Unresolved Item
VIO	Violation