# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket No: License No:	50-341 NPF-43
Report No:	50-341/97008(DRS)
Licensee:	Detroit Edison Company (DECo)
Facility:	Enrico Fermi, Unit 2
Location:	6400 N. Dixie Highway Newport, MI 48166
Dates:	May 19 through 23, 1997
Inspector:	G. Pirtle, Physical Security Inspector
Approved by:	James R. Creed, Chief, Plant Support Branch 1 Division of Reactor Safety

### EXECUTIVE SUMMARY

# Enrico Fermi, Unit 2 NRC Inspection Report 50-341/97008

This inspection included a review of the physical security program performance. It was an announced inspection conducted by a regional security specialist.

- No violations, deviations, unresolved items, or inspection followup items were identified.
- Significant progress was noted in achieving short term goals identified in the Security Excellence Plan and security operations appeared to be stabilizing when compared with the inspection results identified in Inspection report 50-341/96015, dated February 14, 1997 (Section S6).
- Security equipment improvements include state-of-the-art x-ray machines and metal detectors. A 100 yard weapon firing range is scheduled for completion in late June 1997 (Section S2).

## **Report Details**

# S2 Status of Security Facilities and Equipment

### a. Inspection Scope (81700)

The inspector 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. The construction site for the onsite weapon firing range was also visited.

### b. Observations and Findings

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

Quarterly testing of the perimeter alarm system was observed. The equipment testing was conducted in accordance with established procedures.

The licensee plans to install state-of-the-art x-ray equipment and explosive detectors by the end of July 1997. The 100 yard onsite weapons range is scheduled to be completed by the end of June 1997.

#### c. Conclusions

Security facilities and equipment observed functioned as designed and compensatory measures were seldom required. Observed equipment testing was adequate.

### S3 Security and Safeguards Procedures and Documentation

#### a. Inspection Scope (81700)

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

## b. Observations and Findings

Procedures reviewed were detailed and well written. Records and logs reviewed were accurate and complete.

## c. Conclusions

Records and procedures reviewed were adequate.

# S4 Security and Safeguards Staff Knowledge and Performance

# a. Inspection Scope (81700)

The inspector toured various security posts and observed performance of duties 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

Security officers observed on post were very knowledgeable of post requirements and no deficiencies were noted during the post visits. All three shifts were checked by the inspector. Extensive testing of perimeter alarm systems required the secondary alarm station to operate in a "stand alone" mode with two operators present. The alarm station operators controlled and monitored the extensive alarms generated from the testing process in an excellent manner.

Security shift supervisors and response force supervisors on all shifts who were observed were well informed by alarm stations and security personnel of the ongoing security activities and provided appropriate oversight of security force activities.

## c. Conclusions

Security force members were knowledgeable of post requirements and performed the duties in an adequate manner. Strong oversight of security activities was provided by security shift supervisors.

# S5 Security and Safeguards Staff Training and Qualification

## a. Inspection Scope (81700)

Background investigation files and training files for eight randomly selected newly hired personnel were reviewed. The inspector observed stress firing for sixteen security officers at the off site weapons range. The inspector also observed a training class conducted by the Director, Nuclear Security.

#### b. Observations and Findings

Firing range operations were controlled by two qualified range instructors. Range operations were conducted in a safe manner. Personnel being evaluated were familiar with the safe operation and handling of all of the weapons involved, and excellent feedback was provided to officers on errors noted or areas that could be improved. The stress course demonstrated to officers the need to better use available cover when encountering a threat, and identifying when it is appropriate not to return fire when fired upon. After discussion with the Director, Nuclear Security, he agreed to share with the rest of the security force the lessons learned during the stress fire activities.

Although the stress fire course is a familiarization course (no minimum score required), an observation was noted. There appeared to be no evaluation criteria for performance during this exercise. The scores for the stress fire course ranged from 9 to 29 (highest score possible):

No deficiencies were noted during review of the background investigation and training files. Records reviewed confirmed that the personnel were qualified to perform the duty positions (watchperson, response force member) they were assigned.

Presentation of the training class by the Director, Nuclear Security was informative and accurate. Personnel receiving the training actively participated in the training experience.

#### c. Conclusions

Observed staff training and qualifications were adequate. Weapon range operations were conducted in a safe manner.

# S6 Security Organization and Administration

### a. Inspection Scope (81700)

The inspector reviewed progress in resolving organizational and management weaknesses noted in Inspection Report 50-341/96015, dated February 24, 1997.

#### b. Observations and Findings

Several indicators were noted during this inspection v nich showed that the concerns identified in Inspection Report 50-341/96015 were being effectively addressed. The security force staffing levels and performance appeared to be stabilizing. Examples include:

- An aggressive recruitment and training effort since the previous inspection ended in January 1997 has continued. Several contractor security officers have been added to the force with more new hires scheduled for July 1997. The manning level seems high enough to absorb foreseeable change of job requests by licensee officers and resignations by contractor security officers. The uniformed officer force now consists of about 80% contractor and 20% licensee officers on shift.
- Overtime since the beginning of 1997 has been at 10% or lower (management's goal) compared with 15% overtime for 1996.
- All temporary acting positions have been filled, except for the General Supervisor Security Operations, and one security shift supervisor position. Both of these positions are critical supervisory positions for security operations. The Director, Nuclear Security plans to have both positions permanently manned by mid July 1997. No acting positions will be remaining after those selections have been made.

- A vacant security specialist position within the access authorization section and two positions within the security operations support section have been filled. The ongoing recruitment and training demands and upcoming outage will continue to task these two sections.
- The recently implemented security managers back-shift visits have received very positive comments during interviews with security officers.
- Stability seems to have been achieved at the security shift supervisor and response force supervisors positions with the selections being completed and a two year restriction on bidding out for a different job.
- The incentive pay program for remaining with the security force for six to twelve months seemed well received.

#### c. Conclusions

Objectives identified in the Security Excellence Plan (SEP) were being aggressively pursued and significant progress has been made in addressing the management weaknesses and concerns identified in Inspection Report 50-341/96015.

# S7 Quality Assurance in Security and Safeguards Activities

#### a. Inspection Scope (81700)

The inspector reviewed self-initiated performance evaluations, Deviation Event Reports pertaining to security issues, and goals and objectives identified in the Security Excellence Plan (SEP).

### b. Observation and Findings

Security department self-assessments in the area of security operations has increased significantly. Six security operations-related surveillances have been completed or scheduled since February 1997, compared to only three such evaluations conducted during the first six months of 1996. Documentation of the self-initiated evaluations was excellent and detailed. The security staff continues to actively support the Deviation Event Report program. Self-assessment efforts are approaching the level at which they were previously considered a program strength.

The Security Excellence Plan (SEP) continues to be aggressively pursued and short term goals are being achieved. NRC will continue to monitor SEP performance-related goals.

#### c. Conclusions

Self-assessment efforts have improved and were considered adequate.

## S8 Miscellaneous Security and Safeguards Issues

- S8.1 (Open) Unresolved Item 50-341/96002-15: Releasing psychological evaluation reports to individuals involved. This unresolved item pertained to requiring a psychologist or psychiatrist to be retained to receive copies of psychological evaluation results since the licensee's contractor psychological evaluation services will not release the evaluation results directly to the individual involved. This issue is still being reviewed by the NRC.
- S8.2 (Open) Inspection Followup Item 50-341/96008-02: Significant increase in the number of personal errors caused by the security force. The most recent evaluation of this issue noted that of the 22 events within the first six months of 1996, 13 of the events occurred between April and June. For the first five months of 1997, about 15 personal errors have been caused by the security force. The majority of security personal errors are being caused by long term employees rather than newly hired contractor personnel. Although the trend is improving slightly, NRC will continue to monitor the trend.
- S8.3 (Closed) Inspection Followup Item 50-341/96015-01: Several measurement standards for four goals identified in the security force excellence plan not being developed. A measurement standard for these four goals had not been developed and used. The standard being used is an employee survey and evaluation plus Employee Assistance Program interviews and evaluations of the areas. Although the measurement standards are somewhat subjective, the goals being measured are also somewhat subjective (management credibility, morale, communications, etc).
- S8.4 (Open) Inspection Followup Item 50-341/96015-02: NRC monitoring attainment of Security Excellence Plan goals. Security staff goals pertaining to turnover, performance, overtime, and experience/training were reviewed. Short term objectives were progressing satisfactorily. This item will remain open pending future evaluation.
- S8.5 (Closed) Unresolved Item 50-341/96015-03: Compensating for cable trays with safety related cables that were located outside of the vital area boundary. The NRC has completed the review of this issue and has concluded that compensatory measures for the cable trays are not required.
- S8.6 (Open) Inspection Followup Item 50-341/96015-04: Procedures needed to address (1) issue, control, accountability, and handling of firearms, and (2) processing of mutual assistance security force personnel before they are considered qualified to perform duties at Fermi 2. Both procedures were in the final review and approval signature stage. This item will remain open pending approval and issuance of the procedures.
- S8.7 (Open) Unresolved Item 50-341/96015-06: The medical department did not complete testing for glaucoma when physical examinations were completed for armed security force officers. The Deviation Event Report (DER 970095) pertaining to this issue had not been formally closed at the time of the inspection. Therefore, this issue will remain open pending implementation of corrective actions and evaluation of the effectiveness of the corrective actions.

S8.8 A discovery of a licensee operating its facility in a manner contrary to the Updated Final Safety Analysis Report (UFSAR) description highlighted the need for a special focused review that compared plant practices, procedures, and/or parameters to the UFSAR descriptions. The inspector verified that the wording of Section 13.7 of the UFSAR was consistent with observed plant practices, procedures, and/or parameters within the areas inspected.

# 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 May 23, 1997. The licensee acknowledged the findings presented.

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.

# PARTIAL LIST OF PERSONS CONTACTED

### Licensee

A. Antrassian, Compliance Engineer

T. Duffy, Security Shift Supervisor

P. Fessler, Plant Manager

R. Fitzsimmons, Supervisor, Access Authorization

D. Gipson, Senior Vice President, Nuclear Generation

K. Holtz, Security Specialist

J. Korte, Director, Nuclear Security

J. Milton, Acting General Supervisor for Security Operations

B. Naida, Site Manager, Stanley Smith, Inc.

B. O'Connor, Manager, Nuclear Assessment

R. Orwig, Security Specialist

N. Peterson, Supervisor Compliance

P. Smith, Director, Nuclear Licensing

T. Stack, Supervisor, Security Operations Support

R. Taylor, Security Specialist

K. Tyger, Supervisor, Nuclear Quality Assessment

NRC

N. OKeefe, Resident Inspector, Fermi 2

The above personnel were present during the May 23, 1997 exit briefing.

# INSPECTION PROCEDURES USED

IP 81700Physical Security Program For Power ReactorsIP 92904Followup - Plant Support

# ITEMS CLOSED AND DISCUSSED

## CLOSED

50-341/96015-01	IFI	Several Measurement Standards For Security Force Excellence Plan Have not Been Developed
50-341/96015-03	URI	Compensatory Measures for Cable Trays Located Outside of a Vital Area
DISCUSSED		
50-341/96002-15	URI	Not Releasing Copies of Psychological Evaluations to Individuals Involved
50-341/96008-02	IFI	Increased Error Rate Caused by Security Force Members
50-341/96015-02	IFI	NRC Monitoring of Certain Security Excellence Plan Goals
50-341/96015-04	IFI	Procedures Were Not Prepared For Two Important Security Functions
50-341/96015-06	URI	Required Element of Security Force Physical Examination Was Not Completed

# LIST OF ACRONYMS USED

- DER Deviation Event Report
- IFI Inspection Followup Item
- SEP Security Excellence Plan
- SFT&Q Security Force Training and Qualification
- URI Unresolved Item

# PARTIAL LISTING OF DOCUMENTS REVIEWED

Security Excellence Plan Action Item Matrix (undated) for First Quarter of 1997

Internal Memorandum, dated April 25, 1997, Subject: "Security Excellence Plan-Survey Feedback"

Security Event Logs from January 1, 1997 to March 30, 1997

Nuclear Security Safeguards Event Reports Between April 1- May 21, 1997

Quarterly Detection Probability Testing Results, March 12, 1997

Seven Day Operability Test Schedule Forms, March 2- May 13, 1997

Section 13.7 of the UFSAR, Revision 8

Waiver/Extension of Required Training Forms for Four Firearms Training Instructors

Nuclear Security Administrative Procedure SEP-SE-01,"Testing and Maintenance" Revision 9, approved May 15, 1997

Background Investigation Files for Eight Randomly Selected New Hire Security Force Members

Training Records for Eight Randomly Selected New Hire Security Force Members

Security Compliance Evaluation No. 97-0023, "Vehicle and Material Searches

Security Compliance Evaluation No. 97-0034, "Security Operations Records Review"

Security Compliance Evaluation No. 97-0048, "Seven Day Operability Testing of Security Detection Equipment"

Security Compliance Evaluation No. 97-0049, "Access Control, Primary Access Portal"

Security Compliance Evaluation No. 97-59, "Security Drills and Exercise Program"

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