U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-341/94006(DRSS)

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

Licensee: Detroit Edison Company
2200 Second Avenue
Detroit, MI 48226

Facility Name: Fermi 2

Inspection Dates: March 21-25, 1994 onsite
April 5, 1994 in NRC Region III office

Type of Inspection: Routine, Announced Physical Security Inspection

Date of Previous Physical Security Inspection: August 2-10, 1993

Inspector: Gary L. Pirtle 4/22/94
Gary L. Pirtle Date
Physical Security Inspector

Approved By: James R. Creed 4/25/94
James R. Creed, Chief Date
Safeguards and IR Section

Inspection Summary

Inspection Between March 21 and April 5, 1994 (Report No. 50-341/94006(DRSS))
Areas Inspected: Routine, announced physical security inspection to include: Management, Plans, and Audits; Protected Area Physical Barriers, Detection and Assessment Aids; Protected and Vital Area Access Control of Personnel, Packages and Vehicles; Alarm Stations and Communication; Testing and Maintenance; and Followup on Previous Inspection Findings.
Results: The licensee was found to be in compliance with NRC requirements within the areas inspected. Four previous security related inspection items were reviewed and closed. The security force's activities pertaining to the December 25, 1993 turbine event were reviewed and the security force's actions were considered timely and appropriate based upon the circumstances of the event. Some lessons learned were noted however and discussed with the security staff. Maintenance support, material condition of alarm station equipment, and housekeeping were good. Program strengths were noted in reference to audits and self assessment efforts and alarm station operations.

The security force continues to be effectively managed and continues to receive strong management support. Security equipment observed was well maintained and functioned as designed. Personnel observed on duty and personnel interviewed were very knowledgeable of job requirements and responsibilities.

REPORT DETAILS

1. Key Persons Contacted

In addition to the key members of the licensee's staff listed below, the inspector interviewed other employees, contractor personnel, and members of the security organization. The asterisk (*) denotes those present at the onsite Exit Interview conducted on March 25, 1994.

*D. Gipson, Senior Vice President, Detroit Edison Company (DECO)
*R. McKeon, Assistant Vice President and Manager, Nuclear Operations, DECO
*R. Eberhault, Assistant to Plant Manager, Nuclear Production, DECO
*J. Korte, Director, Nuclear Security, DECO
*P. Fessler, Manager, Technical Manager,DECO
*L. Goodman, Director, Nuclear Quality Assurance, DECO
*J. Walker, Director, Plant Engineering, DECO
*J. Plona, Superintendent, Operations, DECO
*B. Szkotnicki, Supervisor, Inspections & Surveillances, Quality Assurance, DECO
*J. Nolloth, Maintenance Supervisor, Nuclear Production, DECO
*J. Hughes, General Supervisor, Electrical Maintenance, DECO
*J. Tibal, Principal Compliance Engineer, Licensing, DECO
*R. Salmon, Principal Engineer, Safety Engineering, DECO
*T. Stack, General Supervisor, Security, DECO
*L. Goans, Supervisor, Security Operations Support, DECO
*R. Fitzsimmons, Supervisor, Access Authorization, DECO
*J. Pendergast, Compliance Engineer, DECO
*J. Louwes, Quality Assurance Auditor, DECO
*R. Orwig, Nuclear Security Specialist, DECO

*K. Riemer, Resident Inspector, NRC Region III

2. Followup on Previous Inspection Findings:

a. (Closed) Inspection Followup Item (Report No. 50-341/93017-04): This issue was addressed in Section 5.c of the above report and pertained to the need to assure that security staff personnel were trained to be able to support the uniformed security force during contingencies. This required a security plan change to identify which personnel would provide the necessary support and training of those personnel. The security plan change has been submitted and approved and the required training has been completed. This item is considered closed.

b. (Closed) Inspection Followup Item (Report No. 50-341/93017-05): This issue was addressed in an attachment to the report and pertained to excessive administrative errors involving documentation of compensatory measures. The cover letter to Inspection Report No. 50-341/93024 also noted that the amount of

administrative errors pertaining to compensatory measures was still excessive.

The security staff conducted an extensive analysis of all alarm station operator documentation of actions for the period between November 15, 1993 and March 15, 1994. This analysis showed that the administrative error rate has been reduced to about 1/2 of 1 percent. This item is considered closed.

c. (Closed) Violation (Report No. 50-341/93024-01): This violation was cited in the above report and pertained to several occasions whereby some required personnel were not in the fitness for duty (FFD) random testing pool to be eligible for random selection for FFD testing. Although initially identified by the licensee, corrective actions implemented had not been effective in preventing recurrence.

During this inspection, a review showed that the corrective actions identified in the licensee's January 27, 1994 letter had been implemented and there have been no other occasions of required personnel not being the FFD random selection test pool. This item is considered closed.

d. (Closed) Inspection Followup Item (Report No. 50-341/93024-02): This issue was addressed in Section 5.b of the above report and pertained to the fitness for duty test consent form not identifying the correct department or personnel who were authorized to receive FFD test result information.

The FFD test consent form has been revised and now correctly authorizes FFD test result information to be provided to the appropriate personnel. This item is considered closed.

3. Entrance and Exit Interviews

a. At the beginning of the inspection, Mr. R. McKeon and other members of the licensee's staff were informed of the purpose of this inspection, it's scope and the topical areas to be examined.

b. The inspector met with the licensee representatives, denoted in Section 1, at the conclusion of onsite inspection activities. A general description of the scope and conduct of the inspection was provided. Briefly listed below are the findings discussed during the exit interview. The licensee representatives were invited to provide comments on each item discussed. The details of each finding listed below are referenced, as noted, in the report.

(1) Personnel present were advised that four previous inspection items would be closed (See Section 2 for details).

(2) Security force performance during the turbine event was excellent. Some lessons learned were noted and warrant

security staff evaluation and action (See Section 5.a for details).

(3) Strengths were noted in reference to security program audits and self assessments and alarm station operations(See Section 5.b for details).

4. Program Areas Inspected:

Listed below are the areas examined by the inspector in which no findings (strengths, violations, deviations, unresolved items or inspection followup items) were identified. Only findings are described in subsequent Report Details sections.

The below listed clear areas were reviewed and evaluated as deemed necessary by the inspector to meet the specified "Inspection Requirements" (Section 02) of the applicable NRC Inspection Procedure (IP). Sampling reviews included interviews, observations, and document reviews that provided independent verification of compliance with requirements. Gathered data was also used to evaluate the adequacy of the reviewed program and practices to adequately protect the facility and the health and safety of the public. The depth and scope of inspection activities were conducted as deemed appropriate and necessary for the program area and operational status of the security system. Additional testing of security systems was not requested by the inspector.

IP 81700-Physical Security Inspection Program for Power Reactors

01. Management, Plans, Audit: (a) Degree of Management Support for Program; (b) Audits Program Corrective Action, Auditor Qualification.

02. Protected Area Physical Barriers, Detection and Assessment Aids: (a) PA Barrier Resistance; (b) Isolation Zones Maintained; (c) PA Detection Functional and Effective; (d) Assessment Aids Functional and Effective.

03. Protected and Vital Area Access Control of Personnel, Packages and Vehicles:

(a) Personnel Access: (1) Identification and Authorization Checked Before Access; (2) Changes Made for Terminations; (3) List/Computer Are Protected; (4) Personnel Are Searched; (5) Badges Are Displayed; (6) Visitors Are Escorted.

(b) Package Control: (1) Packages Authorization Checked; (2) Handcarried Packages Searched at PA.

(c) Vehicle Control: (1) Vehicles Are Searched; (2) Authorization Verified Prior to Entry; (3) Officers at Open Gates; (4) All Self-Propelled and Towed Vehicles Are Controlled.

04. Alarm Stations and Communication: (a) CAS and SAS Are Manned, Equipped, Independent and Diverse and Can Call For Assistance; (b) No Interference of CAS activities; (c) CAS and SAS Have Continuous Communications With Each Onsite Security Officer and Can Call Offsite.

05. Testing and Maintenance: (a) Licensee Implements Programs To Verify Installation, Testing, Maintenance and Correction; (b) Compensatory Measures Implemented That Do Not Decrease Effectiveness.

5. Physical Security Inspection Program For Power Reactors - IP 81700:

An inspection followup item was noted in reference to some weaknesses noted during review of the security force's response to the December 25, 1993 turbine event. Program strengths were noted in reference to security program audits and self assessment, and alarm station operations. Both issues are addressed below.

a. Security force performance was reviewed in reference to the turbine event which occurred on December 25, 1993. Security related documents pertaining to the event were reviewed. Additionally, the Director, Nuclear Security; the Superintendent of Operations; the General Supervisor, Security Operations; and the individual designated to review and critique licensee performance in reference to the event were interviewed by the inspector. The primary purpose of the interviews and record review was to determine if any security force actions, equipment malfunction, procedures or practices hinder response to the emergency event. All management representatives stated that they had no knowledge of any security force actions that hindered response to the event. The management representatives had favorable comments in reference to the security force actions. During the exit meeting, the senior managers were requested to advise us immediately if subsequent review of the turbine event discovered any security measure, practice, or equipment malfunction that did or could have hindered response to the emergency so we could evaluate the issues as early as possible.

Review of the security related documents showed that the security force's response actions to the turbine event were excellent. The need to provide access controls to the turbine building and protected area, meet and escort emergency response vehicles, assist in completion of personnel accountability, and recall additional security force personnel were performed in an excellent manner. The security supervisors present during the event maintained the maximum level of security the circumstances allowed and still provided adequate support in responding to the event. The supervisors were aware of which authority could terminate security measures and what threshold required reporting degraded security measures to the NRC.

Some "lessons learned" were noted during the review and warrant security staff evaluation and action (341/94006-01)

(1) The Safeguard Contingency Plan (SCP) responsibility matrix for Event 3 indicates that two security supervisors (Security Shift Supervisor and an Assistant) would be available during backshift periods. The recent reorganization deleted the assistant position on the security shifts. Although the Security Plan describes only the Security Shift Supervisor position as available onshift, the SCP does not agree with the Security Plan in reference to the minimum supervisor manning level. One the plans (SP or SCP) must be revised so the plans correctly describe the desired level of backshift manning.

(2) Interviews disclosed that the Security Shift Supervisor was involved in personnel accountability. The SCP Event 3 responsibility matrix tasks the alarm stations to perform the accountability. Although the SSS may have performed the accountability support task in an adequate manner, such functions detract from the supervisor's capability to be where needed depending on the circumstances at the time and further may hinder the SSS's capability to appropriately receive and evaluate all emergency related information and provide broad guidance and direction to the security force.

(3) Interviews also disclosed that a radiation protection person responding to the site for the turbine event self disclosed that he had consumed alcohol within five hours prior to responding. The fitness-for-duty (FFD) test normally administered for this purpose was delayed for up to an hour. Only the SSS was trained and qualified to perform the FFD test.

The above observations indicate the need for reanalysis of the minimum shift supervisor manning level and job assignments for the security shift supervisors.

b. Program strengths were noted pertaining to the security program audits and self assessment, and observed operation of the alarm stations.

(1) Self assessment continued to be a program strength. The latest Quality Assurance audit of the security program involved over 300 hours of audit effort, and about 15 surveillances of security functions were performed by the security operations support section. Additionally, maintenance support, equipment inservice time and compensatory measures are monitored and trended on a monthly basis. Personnel errors that cause loggable or reportable security incidents are routinely analyzed on a quarterly basis. No Deviation Event Reports have been issued to the

security department for the first quarter of 1994 because of personnel errors.

(2) Several hours were spent observing alarm station operations. In all cases, the alarm station operators performed in an excellent manner and in accordance with their procedures. The operators were thoroughly familiar with alarm panel and annunciation functions and computer command verifications were correct and timely. Operator shift changes were completed in a professional and detailed manner and in accordance with the shift change checklist. All appropriate information was passed on between operators. Material condition of the control consoles and related equipment was good.