U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-155/94003(DRSS)

Docket No. 50-155 License No. DPR-6

Licensee: Consumers Power Company
1945 West Parnall Road
Jackson, MI 49201

Facility Name: Big Rock Point Nuclear Power Plant

Inspection Dates: March 14-18, 1994 onsite
April 5, 1994 in NRC Region III Office

Type of Inspection: Announced, Routine Physical Security Inspection

Date of Previous Physical Security Inspection: March 22-26, 1993

Inspector: Gary L. Pirtle 4/20/94
Gary L. Pirtle Date
Physical Security Inspector

Approved By: James R. Creed 4/20/94
James R. Creed, Chief Date
Safeguards and IR Section

Inspection Summary

Inspection Between March 14-April 5, 1994 (Report No. 50-155/94003(DRSS))
Areas Inspected: Routine, announced physical security inspection involving Management Support; Protected and Vital Area Barriers and Detection and Assessment Aids; Access Control - Personnel, Packages, and Vehicles; Alarm Stations; Testing, Maintenance and Compensatory Measures; Training and Qualifications; and Followup on Previous Inspection Findings.
Results: The licensee was found to be in compliance with NRC requirements except for the adequacy of monthly review and identification of personnel continuing to require unescorted access to the plant's vital areas. A previous inspection item pertaining to excessive personnel error caused loggable security incidents was reviewed and closed. Two inspection followup items were identified. One item pertained to long term compensatory measures, and the other item pertained to needed security management guidance for inactivation of an alarm system. Self assessment efforts and housekeeping were considered good. The material condition of some equipment within alarm stations and the identification station required attention. Program strengths were noted pertaining to security personnel's knowledge, quality of the reviewed security procedures, and quality of the training observed.

The security program continues to receive adequate management support. Security equipment functioned as designed and was generally well maintained and repaired in a timely manner. Management oversight of the security functions was adequate. However, more aggressive resolution of conditions that require implementation of compensatory measures is warranted.

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 18, 1994.

*J. Rang, Acting Plant Manager, Consumers Power Company (CPCo)
*G. Withrow, Plant Safety and Licensing Director, CPCo
*G. Boss, Project and System Engineering Manager, CPCo
*M. Bourassa, Licensing Supervisor, CPCo
*M. VanAlst, Property Protection Supervisor, CPCo
*B. Rabideau, Property Protection Operations Supervisor, CPCo
*R. Hill, NPAD, Senior Assessor, CPCo
*D. Zastrow, District Manager, Burns International Security Services, Inc.(BISSI)
*S. LaJoice, Site Manager, BISSI

*R. Leemon, Senior Resident Inspector, NRC Region III

2. Followup on Previous Inspection Findings

(Closed) Inspection Followup Item (Report No. 50-155/93005-01): This issue was addressed in Section 5 of the above referenced report and pertained to an excessive number of loggable security events being caused by personnel errors and management actions not being effective in reversing the adverse trend.

The previous inspection report noted that about 66% of the 152 loggable security incidents for 1991 and 1992 were caused by personnel failing to adequately implement or follow security requirements. Review of data for the first quarter of 1993 showed that about 50% of the 25 loggable security incidents were caused by personnel error. The predominate security related incidents caused by personnel were failure to secure vital area doors after use (10 such incidents during the first quarter of 1993).

Review of this issue during this inspection showed that management actions have been effective in reversing the trend. Interviews disclosed that within the past six months, there have been only five vital area door ajar alarms caused by personnel error. Additionally, only four other personnel error related security incidents (lost security badges) have occurred within the past six months. No one individual caused more than one security related loggable security incident and no vital area door was involved in more than one vital area door ajar alarm during the first quarter of 1994. This issue is considered closed.

3. Entrance and Exit Interviews

a. At the beginning of the inspection, Mr. J. Rang 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 one previously identified inspection item would be recommended for closure (See Section 2 for details).

(2) A violation was noted pertaining to inadequate review of personnel needing continued unescorted access on a monthly basis (See Section 5.a for details).

(3) An inspection followup item was noted pertaining to long term compensatory measures (See Section 5.b for details).

(4) An inspection followup item was noted pertaining to the need for security management guidance for inactivating the perimeter alarm system (See Section 5.c for details).

(5) Program strengths were identified in reference to security personnel's knowledge of job responsibilities and job performance; observed training; and quality of the reviewed security procedures (See Section 5.d for details).

(6) Housekeeping and self assessment efforts were considered adequate. Material condition for some alarm panels and associated equipment in the alarm stations and the identification station required attention (See Section 5.e 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) Security Program Plans Changes; (c) Audits Program Corrective Action, Auditor Qualification.

02. Protected and Vital Area Physical Barriers, Detection and Assessment Aids: (a) PA and VA Barrier Resistance; (b) Isolation Zones Maintained; (c) PA and VA 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; (7) Rapid Ingress and Egress in Emergencies.

(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) Two Officers at Open Gates.

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.

06. Security Training and Qualification: (a) Each Individual Is Trained, Qualified and Equipped For Each Task Prior To Assignment; (b) Security Personnel Have Knowledge and Ability To Perform Duties.

5. Physical Security Program for Power Reactors (IP 81700):

One violation, two inspection followup items and three program strengths were identified. Housekeeping and self assessment efforts were adequate; however, some equipment in the alarm stations and the identification station required attention. Details pertaining to these issues are addressed below:

a. Section 6.1 of the licensee's security plan requires plant management personnel to identify on a monthly basis those personnel who have a continuing work related need for access to the plant's vital areas. This section of the plan also requires plant management to assure that those personnel identified have completed security orientation training. This management review action is accomplished by management review and issuing of the access authorization list on a monthly basis.

Contrary to this requirement, a sample selection of about 25 personnel showed that four personnel identified by plant management (Plant Manager and Department Managers) as having a work related need for access to vital areas did not even have a current security badge issued to them. One of the four personnel had not had access to the plant since 1991. Subsequent review by the security department resulted in about 11 personnel being removed from the monthly access authorization list. This violation identifies a need for more attention to detail in reviewing unescorted access authorization requirements on a monthly basis (155/94003-01).

b. During the course of the inspection, it was noted that the security force had been compensating for lighting being below the minimum required level in a small sector along the protected area perimeter. Followup inspection efforts on this matter disclosed that the compensatory measures had been in effect since about April 1993 (11 months). Interviews with the engineering representative familiar with the issue disclosed that the work order pertaining to the lighting deficiency had not been followed up on in sufficient depth to resolve the issue. Before the inspection was over, temporary lighting was installed to bring the illumination level to that level required by the security plan and compensatory measures were terminated. Security management and engineering support lacked sufficient aggressiveness and concern to resolve this matter in a timely manner. Conditions requiring extended compensatory measures will be reviewed during future inspections (155-94003-02).

c. During the inspection it was noted that the perimeter alarm system had been inactivated and compensatory measures were in place to compensate for the inactivated alarm system. Further inquiries disclosed that security management had not developed procedures and training had not been conducted on the criteria to use to determine when inactivation of the alarm system was warranted.

Additionally, no guidance had been provided to advise security personnel on the frequency that reset of the system should be attempted, and what criteria would determine that system reliability had been restored. The decision to inactivate the system was left to the discretion of each alarm station operator.

Deactivation of the alarm system is too critical of a system vulnerability to allow this to be determined and initiated by individual alarm station operators without procedural guidance. Security management agreed to address the concern and developed the necessary guidance before the close of the inspection. The inspection followup item will review the effectiveness of the criteria and compliance with the procedure during a future inspection (155-94003-03).

d. Program strengths were identified in reference to security personnel's knowledge of job responsibilities and job performance; observed training; and quality of the reviewed security procedures.

In all interviews conducted by the inspector, the security personnel were thoroughly familiar with all procedural requirements pertaining to their job functions. Except as note above, security procedures were well written and of sufficient depth to address all relevant functions required to complete the task or process addressed by the procedure and no conflicts were noted between the procedural requirements and the provisions of the security plan.

Training for four new hired personnel was observed. The training pertained to the GLOCK 9mm revolver. The training was conducted in accordance with the lesson plan objectives and criteria and the instructor was very knowledgeable of the subject matter. Questions were encouraged and training drills involving the handgun were well monitored and done in a safe manner. Personnel receiving the training stated during interviews that they considered the training they had received in the previous few weeks to be excellent. Some of the personnel had received similar training in military or civilian police schools.

e. Self assessment efforts were considered adequate and included an audit by the Nuclear Performance Assessment Department, an audit by the Burns Security Services, Inc. audit team, almost daily tracking of loggable security events to identify the need for corrective actions as early as possible, frequent documented self assessment job performance evaluations, and analysis of quarterly logged security events.

Housekeeping within the security areas was adequate and the material condition of most of the security equipment observed was in a clean and operable condition. The exception to this general observation was the material condition of some of the alarm

monitor and associated equipment within the alarm stations and the identification station. Some of the equipment is showing signs of its obvious age. Areas of some control consoles and tables in these locations are worn to the bare metal and beyond the surface of the table tops. The obvious signs of wear distract somewhat from the professional image the security force has earned through their performance.