REVIEWED BY: (NAME) R. BELLANY Royald P. Bellany NRC- Regun I Novembre 29, 1959 (ORGANIZATION)

> U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report No. 50-309/89-19

Docket No. 50-309

License No. DPR-36

Licensee: Maine Yankee Atomic Power Station

83 Edison Drive

Augusta, Maine 04336

Facility Name: Maine Yankee Atomic Power Station

Inspection At: Wiscassett, Maine

Inspection Conducted: October 15-20, 1989

Type of Inspection: Unannounced Physical Security

Date of Last Physical Security Inspection: March 20-24, 1989

W. K. Lancaster, Physical Security Inspector date

W. K. Lancaster, Physical Security Inspector date

W. K. Lancaster, Physical FOR 11/20/89

W. T. Olsen, Reactor Engineer - Physical date

Security

Approved by:

R. R. Kelmig, Chief, Safeguards Section
Division of Raciation Safety and Safeguards

Inspection Summary: Routine, Unannounced Physical Security Inspection on October 15-20, 1989 (Report No. 50-309/89-19)

Areas Inspected: Cosite followup of previously identified items; Management Effectiveness, Management Support, and Audits; Protected Area Physical Barriers, Detection and Assessment Aids; Protected and Vital Area Access Control of Personnel, Packages and Vehicles; Alarm Stations and Communications; Testing, Maintenance and Compensatory Measures; and Training and Qualification Program. The inspection included a back-shift inspection of security operations on Sunday, October 15, 1989.

Results: The licensee was found to be in compliance with NRC requirements in the areas inspected. However, several potential weaknesses were identified in the areas of Management Effectiveness, Protected Area Assessment Aids and VA Detection Aids.

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DETAILS

1. Key Personnel Contacted

a. Licensee and Contractor Personnel

P. Lydon, Vice President, Finance and Administration

*R. Blackmore, Plant Manager, Maine Yankee

*B. Castonguay, Manager, Administration

*R. Nelson, Security Director, Maine Yankee

*P. Metivier, Security Supervisor, Maine Yankee

*R. Crosby, Senior Licensing Engineer, Maine Yankee

*R. Hayward, Quality Programs Department, Maine Yankee

*R. Johnson, Vice President, Hall Security

*C. Urquhart, Chief, Hall Security

J. Frothingham, Manager of Quality Programs, Maine Yankee

H. Torberg, Security Supervisor, Maine Yankee

b. U.S. Nuclear Regulatory Commission Personnel

C. Holden, Senior Resident Inspector

*R. Freudenberger, Resident Inspector

The inspectors also interviewed other licensee and contractor security personnel.

*Indicates those present at the exit interview.

2. Onsite Follow-up of Previously Identified Items

- a. (Closed) VIO 50-309/89-07-01: The licensee failed to conduct adequate searches of vehicles entering the protected area (PA). The licensee's corrective actions, as documented in a May 25, 1989, letter to the NRC, were verified and found to be satisfactory. During this inspection, the inspectors observed that effective searches of vehicles were being performed by the security force.
- b. (Closed) UNR 50-309/88-20-01: The licensee was to provide the NRC with missing documentation and to re-evaluate the documentation process for the Maine Yankee unescorted access (screening) program. The licensee conducted a complete audit of all unescorted access records on-site to ensure that the required authorization (screening) documentation was available. The licensee upgraded all files, as necessary, and these actions were verified by the inspectors during this inspection. The licensee is awaiting final NRC action on the access authorization rule to determine possible other changes to the Maine Yankee access authorization program.

Management Effectiveness, Management Support, Security Program Plans, and Audits

a. Management Effectiveness - Security Programs

The licensee is in the process of upgrading the security program and has developed an aggressive agenda and schedule to complete this task. The following items are complete or in progress:

- •Upgrading communications between the licensee, contractor and the NRC.
- •Including a security assessment during the weekly management area inspection program.
- •Upgrading security procedures for designated and non-designated vehicle access.
- •Developing and implementing a lighting surveillance procedure.
- ·Upgrading security key control procedures.
- •Revising security procedures to clarify compensatory measures and one-hour notifications to the NRC and providing training to both security and plant operations personnel in these new procedures.
- •Revising the NRC-approved physical security plan (the Plan) to make it more effective in implementing the security program.
- ·Improving search procedures at the main access control portal.
- Remodeling the main access control portal for more effective security.
- Revising procedures to improve security barrier control.
- Upgrading metal and explosive detectors in the main access control portal.
- •Installing X-ray equipment in the main access control portal.
- ·Upgrading protected area lighting.
- Procuring portable lighting equipment to be used as compensatory measures, when necessary.
- ·Upgrading the security force Training Program.

The inspectors found these upgrades to be indicative of licensee management's efforts to implement a more performance-priented security program. The inspectors noted that security force members (SFMs), were, in general, more knowledgeable of their post duties, contents of procedures and their other responsibilities than was previously observed. Also, the SFMs exhibited a more professional demeanor than before. Minor security concerns identified by the inspectors during the inspection were discussed with on-site security management and prompt corrective actions were taken as applicable. However, the inspectors noted during extensive interviews with the contractor SFMs, that morale was extremely low. A majority of the SFMs expressed concerns about a lack of respect and regard by plant employees, inadequate pay and benefits, and excessive overtime.

The security force morale issue was discussed with the Security Director and his staff during the inspection and a commitment was made by the licensee to investigate and attempt to resolve this issue. This item is considered an inspector follow-up item and will be reviewed during subsequent inspections. (IFI 50-309/89-19-01)

Additionally, the inspectors witnessed personnel and package access processing at the main access control portal during shift changes on several occasions and noted that several plant employees displayed a poor attitude toward security officers while undergoing required searches. The inspectors also observed one incident where a plant employee was not effectively searched by an SFM because the SFM was intimidated by the employee. This incident was immediately brought to the attention of security and station management by the inspectors and action was promptly taken to inform all station personnel that such incidents would not be tolerated.

- b. Management Support Management support for the licensee's physical security program was determined to be adequate by the inspectors. This determination was based upon the inspectors' reviews of various aspects of the licensee's program during this inspection as documented in this report. No deficiencies were noted.
- audits The inspectors reviewed the 1989 annual security program audit report and verified that the audit had been conducted in accordance with the NRC-approved Physical Security Plan (the Plan). The audit was comprehensive in scope with the results reported to the appropriate levels of management. The inspectors' review included the responses from the security organization to the audit findings. The documented corrective actions appeared appropriate for the findings. No deficiencies were noted.

4.0 Protected and Vital Area Physical Barriers, Detection and Assessment Aids

- a. Protected Area Barriers The inspectors conducted a physical inspection of the protected area (PA) barrier on October 17 and 18, 1989. The inspectors determined, by observation, that the barriers were installed and maintained as described in the Plan. No deficiencies were noted.
- b. The inspectors observed the PA perimeter detection aids on October 17, 1989, and determined that they were installed, maintained and operated as committed to in the Plan. The inspectors noted that the licensee had recently completed upgrading the PA Intrusion Detection System (IDS) and that the nuisance/false alarm rate for the IDS has decreased significantly. No deficiencies were noted.
- c. <u>Isolation Zones</u> The inspectors verified that the isolation zones were adequately maintained to permit observation of activities on both sides of the PA barrier. No deficiencies were noted.

d. Protected Area and Isolation Zones Lighting

The inspectors conducted a lighting survey of the PA and isolation zones on October 15, 1989, from approximately 10:00 p.m. to 11:00 p.m., while accompanied by a representative of the licensee's security organization. The inspectors determined, by observation, that lighting in the PA and isolation zones was adequate. No deficiencies were noted.

e. Assessment Aids - The inspectors observed the PA perimeter assessment aids and determined that they were generally installed, maintained, and operated as committed to in the Plan.

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This item will be reviewed during subsequent inspections. (IFI 50-309/89-19-02)

- f. Access Control and Vital Area Barriers The inspectors conducted a physical inspection of both access control area (ACA) and vital area (VA) barriers on October 18, 1989. The inspectors determined, by observation, that the ACA and VA barriers were installed and maintained as described in the Plan. No deficiencies were noted.
- g. Access Control and Vital Area Detection Aids The inspectors observed the ACA and VA detection aids and determined that they were generally installed, maintained and operated as committed to in the Plan.

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This item will be reviewed during subsequent inspections. (IFI 50-309/89-19-03)

5.0 Protected, Access Control and Vital Area Access Control of Personnel, Packages and Vehicles

- a. Personnel Access Control The inspectors determined that the licensee was exercising positive control over personnel access to the PA, ACAs and VAs. This determination was based on the following:
 - (1) The inspectors verified that personnel are properly identified, and authorization is checked prior to issuance of badges and key-cards. No deficiencies were noted.
 - (2) The inspectors verified that the licensee has a program to confirm the trustworthiness and reliability of employees and contractor personnel. This program includes checks on employment, credit and criminal history, and a psychological examination. No deficiencies were noted.
 - (3) The licensee is in the process of conforming its fitness-for-duty program to the recently published NRC requirements (10 CFR 26).
 - (4) The inspectors reviewed the security lock and key procedures and determined that they were consistent with commitments in the Plan. The inspectors also reviewed the PA, ACA and VA key inventory logs, and discussed lock and key procedures with members of the security force and the licensee's security staff. No deficiencies were noted.
 - (5) The inspectors verified that the licensee takes precautions to ensure that an unauthorized name cannot be added to the access list by having only one member of security management authorized to make changes to that list. No deficiencies were noted.
 - (6) The inspectors verified that the licensee has a search program, as committed to in the Plan, for firearms, explosives, incendiary devices and other unauthorized materials. The inspectors observed personnel access processing during shift changes, visitor access processing, and interviewed members of the security force and licensee's staff concerning personnel access procedures. No deficiencies were noted.
 - (7) The inspectors determined, by observation, that individuals in the PA, ACAs and VAs display their access badges as required. No deficiencies were noted.
 - (8) The inspectors verified that the licensee has escort procedures for visitors to the PA, ACAs and VAs. No deficiencies were noted.
 - (9) The inspectors verified that the licensee has a mechanism for expediting access to vital equipment during emergencies and that

the mechanism is adequate for its purpose. No deficiencies were noted.

- (10) The inspectors verified that unescorted access to ACAs and VAs is limited to authorized individuals. The access list is revalidated & least once every 31 days as committed to in the Plan. No deficiencies were noted.
- b. Package and Material Access Control The inspectors determined that the licensee was exercising positive control over packages and material entering the PA via the main access control portal. The inspectors reviewed the package and material control procedures and found that they were consistent with commitments in the Plan. The inspectors also observed package searches and interviewed members of the security force and the licensee's security staff about package and material control procedures. No deficiencies were noted.
- c. Vehicle Access Control The inspectors determined that the licensee properly controls vehicle access to and within the PA. The inspectors verified that vehicles are properly authorized prior to being allowed to enter the PA. Identification is verified by the SFM at the main vehicle access portal. This procedure is consistent with the commitments in the Plan. The inspectors also reviewed the vehicle search procedures and determined that they were consistent with commitments in the Plan. The inspectors determined that at least two SFMs control vehicle assess at the main vehicle access portal. No deficiencies were identified.

6. Alarm Stations and Communications

- a. Alarm Stations The inspectors determined by observation that the central alarm station (CAS) and the secondary alarm station (SAS) were manned and operating in compliance with the Plan. Both the CAS and SAS operators demonstrated adequate skill and knowledge in the performance of their required duties. No deficiencies were noted.
- b. <u>Communications</u> The inspectors observed functional testing of communications equipment between the CAS and the required on- and off-site locations. No deficiencies were noted.

7. Testing, Maintenance and Compensatory Measures

a. Testing and Maintenance - The inspectors determined that the licensee was conducting testing and maintenance of security systems as committed to in the Plan. The inspectors made this determination based upon a review of the test records for security equipment, observation of functional testing of security search equipment located in the main access control portal; witnessing functional testing of VA barrier access door IDS equipment; and interviewing personnel in the Instrument and Control (I&C) department responsible for the maintenance of security equipment. No deficiencies were

found except as previously noted in Section No. 4.g of this report.

b. Compensatory Measures - The inspectors observed the implementation of compensatory measures taken in response to failed equipment for a VA access door. The compensatory measure was implemented in conformance with Plan commitments and the security plan implementing procedures. No deficiencies were noted.

8. Security Training and Qualification

The inspectors reviewed training records and procedures and found them to be in accordance with the NRC-approved Training and Qualification (T&Q) Plan. The inspectors also interviewed members of the security organization and found them to be knowledgeable of their assigned duties and responsibilities. No deficiencies were noted.

9. Exit Interview

The inspectors met with the licensee representatives identified in Paragraph 1 at the conclusion of the inspection on October 20, 1989. At that time, the purpose and scope of the inspection were reviewed, the findings presented and commitments made by the licensee's representatives during the inspection were confirmed.

At no time during this inspection was written material provided to the licensee by the inspectors.