

SAFEGUARDS INFORMATION

DETERMINATION MADE BY: R.R. KEIMIG

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Office Date 2-27-91

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-271/91-04

Docket No. 50-271

License No. DPR-28

Licensee: Vermont Yankee Nuclear Power Corporation
RD 5, Box 169
Ferry Road
Brattleboro, Vermont 05301

Facility Name: Vermont Yankee Nuclear Power Station

Inspection At: Vernon, Vermont

Inspection Conducted: January 28 - February 1, 1991

Type of Inspection: Routine, Unannounced Physical Security

Inspectors: Ronald J. Albert 02-26-91
R. J. Albert, Physical Security Inspector date

Thomas W. Dexter 2/26/91
T. W. Dexter, Physical Security Inspector date

Approved by: R.R. Keimig 2-26-91
R. R. Keimig, Chief, Safeguards Section date
Division of Radiation Safety and Safeguards

Inspection Summary: Routine, Unannounced Physical Security (Inspection Report
No. 50-271/91-04)

Areas Inspected: Management Support, Security Program Plans and records and reports; Protected and Vital Area Physical Barriers, Detection and Assessment Aids; Protected and Vital Area Access Control of Personnel, Packages and Vehicles; Alarm Station and Communications; Testing, Maintenance and Compensatory Measures; Security Training and Qualifications; and followup of previously identified items.

Results: The licensee was in compliance with NRC requirements in the areas inspected. However, documentation of security-related activities was found lacking in details, in some cases.

DETAILS

1.0 Key Personnel Contacted

Licensee Personnel

- *D. A. Reid, Plant Manager
- *R. D. Pagodin, Technical Services Superintendent
- *M. T. Varno, Plant Services Supervisor
- *J. M. Moriarty, Security Supervisor
- *R. P. Grippardi, Quality Assurance Supervisor
- *S. Jefferson, Assistant to Plant Manager
- *J. Kinsey, Project Engineer
- R. B. Putnam, Access Control Coordinator

U. S. Nuclear Regulatory Commission (NRC)

- *H. Eichenholz, Senior Resident Inspector

*present at the exit interview

2.0 NRC Onsite Follow-up of Previously Identified Items

- 2.1 (Open) Violation (50-271/89-08-03): Failure to provide adequate assessment of PA intrusion detection system (IDS) alarms. During this inspection, the inspectors found that the licensee was still in the process of upgrading assessment aids.

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This item will remain open pending NRC's review of the completed work.

- 2.2 (Closed) Inspector Follow-up Item (50-271/89-20-04): Plant repair records indicated that some repairs to security equipment and systems were not being accomplished in a timely manner. During this inspection, the inspectors v at the licensee has improved the response time for repairs using a prioritization system that ensures key security equipment is repaired on a priority basis. This item is closed.

- 2.3 (Closed) Unresolved Item (50-271/90-11-01): The inspectors determined that the licensee uses union Business Agent's (BAs) certifications as the bases for granting unescorted access to contract personnel. During this inspection, the inspectors determined that the licensee has abandoned this practice; instead, complete background checks will be conducted for all contractor employees. The inspectors reviewed Vermont Yankee Policy No. 325 which includes this commitment. It is scheduled to be effective on March 18, 1991. The policy appeared to be acceptable. Some minor changes identified by the inspectors, and accepted by the licensee, will be incorporated. This item is closed.
- 2.4 (Closed) Violation (50-271/90-11-02): Failure to perform audits of contractors' background investigation methods. The licensee has included a requirement for auditing contractor background investigation methods in the Vermont Yankee Nuclear Power Corporation's Audit Plan, dated January 30, 1991, which had been approved. This plan was reviewed by the inspectors and determined to be adequate. Minor changes identified by the inspectors, and accepted by the licensee, will be incorporated. This item is closed.

3.0 Management Support, Security Program Plans and Records and Reports

- 3.1 Management Support - Management support for the licensee's physical security program was determined to be acceptable by the inspectors. This determination was based upon the inspectors' reviews of various aspects of the licensee's program, the licensee's correction of previous NRC-identified items, and response to minor concerns identified during this inspection.

Since the last NRC routine physical security inspection was conducted on May 21-25, 1990, (Inspection No. 50-271/90-04) the licensee has continued to implement a security enhancement program to address potential weaknesses at the plant. The licensee's program addresses both long- and short-term corrective actions to enhance the effectiveness of the existing program.

Specific areas of the licensee's security enhancement program include:

- Phase II of the Protected Area (PA) Closed Circuit Television (CCTV) System
- Construction of the new PA Gatehouse scheduled to begin on February 7, 1991
- Local Law Enforcement Agency (LLEA) Interface Training
- Additional Fire Brigade Member to Security Shift

In response to a potential threat to nuclear power plants brought on by the Persian Gulf conflict, the licensee heightened its security awareness and implemented additional security measures. During the inspection, the inspectors reviewed these measures and found them to be comprehensive, extensive and prudent.

In summary, management attention to and support for the nuclear security program appears to have increased since the last inspection. Based upon the inspectors' reviews of the licensee's security program and the efforts being made to upgrade and enhance it, the inspectors determined that the program is receiving appropriate attention and support.

- 3.2 Security Program Plans - The inspectors verified that changes to the licensee's Security, Contingency, and Guard Training and Qualification Plans, as implemented, do not decrease the effectiveness of the respective plans, and were submitted in accordance with NRC requirements. No discrepancies were noted.
- 3.3 Records and Reports - The inspectors reviewed the licensee's safeguards event log entries for the last two quarters of 1990. During the review, the inspectors determined that the documentation was lacking in details, particularly in the area of compensatory measures. Whereas the times when security events occurred were consistently recorded, the times when the events ended or when compensatory measures were taken were not being consistently recorded. Without such times, determining whether compensatory measures were taken in a timely manner becomes difficult.

When this matter was brought to the licensee's attention, the inspectors were informed that compensatory measures were, in most cases, recorded by the security computer and that, if the measures were not in place within 10 minutes of a degradation, the contract security shift supervisor would notify licensee security management. However, the licensee agreed to evaluate this matter and take corrective action. This matter will be reviewed during a subsequent inspection.

4.0 Protected Area Physical Barriers, Detection and Assessment Aids

- 4.1 Protected Area Barriers - The inspectors conducted a physical inspection of the PA barrier on January 29, 1991. No deficiencies were noted.
- 4.2 Protected Area Detection Aids - The inspectors observed the licensee conduct tests of the PA IDS on January 29, 1991. No deficiencies were noted.

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- 4.3 Isolation Zones - The inspectors verified that isolation zones were well maintained and free of obstructions that could affect assessment and response capabilities. No deficiencies were noted.
- 4.4 Protected Area and Isolation Zone Lighting - The inspectors conducted a lighting survey of the PA and isolation zones on January 29, 1991. The inspectors determined, by observation, that the lighting in both the PA and isolation zones was as committed to in the NRC-approved security plan (the Plan). No deficiencies were noted.
- 4.5 Assessment Aids - The inspectors observed the use of assessment aids and other security equipment in operation in the Central Alarm Station (CAS), during day and night hours, on January 29, 1991. The actions identified in Section 2.1 of this inspection report indicate the licensee's efforts to upgrade PA assessment. Those efforts will be reviewed during subsequent inspections.
- 5.0 Protected and Vital Area Access Control of Personnel and Vehicles
- 5.1 Personnel Access Control - The inspectors determined that the licensee was exercising positive control over personnel access to the PA and Vital Areas (VAs). This determination was based on the following:
- (a) The inspectors verified that personnel are properly identified and authorization is checked prior to issuance of badges and key-cards. No discrepancies were noted.
 - (b) The inspectors verified that the licensee has a program to confirm the trustworthiness and reliability of employees and contractor personnel. No discrepancies were noted.
 - (c) 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, and visitor access processing. The inspectors also interviewed members of the security force and licensee's security staff about personnel access procedures. No

discrepancies were noted.

- (d) The inspectors determined, by observation, that individuals in the PA and VAs display their access badges as required. No discrepancies were noted.
- (e) The inspectors verified that the licensee has escort procedures for visitors in the PA and VAs. No discrepancies were noted.

5.2 Vehicle Access Control - The inspectors determined, through observation, that the licensee properly controls vehicle access to and within the PA. The inspectors also verified that vehicles received proper authorization prior to being allowed to enter the PA. Both procedures were consistent with commitments in the plan.

While observing an SFM conduct a vehicle search, the inspectors noticed that the SFM did not search two boxes of welding rods. The inspectors brought this matter to the SFM's attention. The SFM immediately opened and searched the boxes. When asked why the boxes were not initially searched, the SFM said that the boxes had been overlooked.

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Although the licensee had available an acceptable "read and understand" document, that document was not utilized in the case of the revised gate procedure. Additionally, training on the new procedure had not yet been accomplished because the revised procedure had been made effective on the date of implementation. The licensee agreed to review this matter and take corrective action. This matter will be reviewed during a subsequent inspection.

6.0 Alarm Station and Communications

The inspectors observed the operation of the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS) and determined that they were maintained and operated as committed to in the Plan. CAS/SAS operators were interviewed by the inspectors and found to be knowledgeable of their duties and responsibilities. No discrepancies were noted.

7.0 Testing, Maintenance and Compensatory Measures

The inspectors reviewed the testing and maintenance records and confirmed that the records committed to in the Plan were on file and readily available for licensee and NRC review. The station uses instrumentation and controls (I&C) technicians to conduct preventive and corrective maintenance on security equipment. A check of repair records during the last two physical security inspections indicated that repairs, replacements and testing were not being accomplished in a timely manner. Corrective actions, as identified in Section 2.2 of this inspection report, indicate that the licensee has been attentive to this potential weakness. The licensee's continuing efforts to upgrade this program will be reviewed during subsequent inspections.

The inspectors also reviewed the licensee's use of compensatory measures and determined them to be as committed to in the Plan.

8.0 Security Training and Qualification

The inspectors randomly selected and reviewed the training and qualification records for six SFMs on January 31, 1991. The physical and firearms qualification records for those SFMs were also reviewed. The SFMs selected were armed officers and supervisory personnel.

In reviewing the firearms qualification records of one SFM, the inspectors determined that the individual had failed to qualify with a handgun on June 21, 1990. The licensee informed the inspectors that the individual had been taken back to the range and had fired a qualifying score with the handgun on June 28, 1990. However, the licensee could not provide the inspectors with documentation to substantiate the individual's refiring.

When asked, the inspectors were informed that the individual had retained armed status and had continued performance of armed duties in the interim. The licensee's training and qualification plan allows an individual, who fails to qualify on a given range day, 10 days to requalify, but it does not address the individual's status in the interim.

During a meeting on February 1, 1991, with the licensee and the principal parties, the licensee presented the inspectors with qualifying range targets, which were not signed and dated by the individual; however, signed affidavits from all of the principal parties attesting to the requalification date were also provided. The licensee committed to the inspectors that the following corrective action had been or would be taken:

- the subject individual was removed from armed status,
- the subject individual would be taken back to the range for requalification,
- a 100% audit of training records would be conducted to look for similar deficiencies in documentation of qualifications,
- the method of documenting training would be evaluated and corrective action taken as appropriate, and
- the training and qualification plan will be reviewed and revised to eliminate any ambiguity.

The inspectors consider the licensee's corrective action in this matter to be appropriate. This area will be reviewed during subsequent inspections.

Several SFMs were interviewed to determine if they possessed the requisite knowledge and ability to carry out their assigned duties. The interview results indicated that they were knowledgeable of their job requirements. No discrepancies were noted.

The licensee continues to administer the training program with three professionals (1 supervisor and 2 full-time instructors). At the time of the inspection, the licensee's station security organization consisted of 53 contract personnel (35 armed SFMs, 10 supervisory personnel, 5 management personnel, 1 clerk, and 2 personnel in training). The inspectors verified that the armed response force meets the commitments in the Plan and that there is always one full-time member of the security organization on-site who has the authority to direct security activities. No deficiencies were noted.

9.0 Exit Interview

The inspectors met with the licensee representatives indicated in paragraph 1 at the conclusion of the inspection on February 1, 1991. At that time, the purpose and scope for the inspection were reviewed, and the findings were presented. The licensee's commitments, as documented in this report, were reviewed and confirmed with the licensee.