

June 10, 1998

EA 98-294

Mr. Gregory A. Maret
Director of Operations
Vermont Yankee Nuclear Power Corporation
RD 5, Box 169
Ferry Road
Brattleboro, Vermont 05301

SUBJECT: NRC INSPECTION REPORT 50-271/98-05 AND NOTICE OF VIOLATION

Dear Mr. Maret:

This letter refers to your May 13, 1998 correspondence, in response to our April 13, 1998 letter.

Concerning the first violation, thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

In your response, you requested that the NRC reconsider the validity of the second cited violation contained in the report (Item 50-271/98-05-02). After careful review of your submittal, we have concluded that your rationale and basis will not support withdrawing the violation for the following reasons:

- (1) Your response stated, in part, that, "Contrary to the inspection report, the x-ray search did not detect any unidentified objects in the backpack." As indicated in Section S1 (b.) of our report, the x-ray machine detected an object in the backpack that could not be identified and the backpack was physically searched by a security force member. This observation was verified by two NRC inspectors, at two independent locations, on two different x-ray video monitors.
- (2) The NRC agrees with your response which states, in part, that "He (the Security Force Member) did not perform an effective hand search of the bag and did not locate the test device." This is, in fact, the basis of the violation. The Security Force Members actions were contrary to the NRC-approved Physical Security Plan, Revision 28, dated August 9, 1996, Section 5.3, which states, in part, that "all hand carried packages shall be searched by x-ray or visually by security personnel in accordance with plant security procedures prior to entry." The search conducted was not in accordance with plant security procedures and as a result was ineffective, resulting in a failure to detect the test device. We concluded that your search procedure was adequate to preclude this violation, however, the Security Force Member failed to properly implement the search procedure.

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From our review, it is evident that your Security Force member failed to meet all of the requirements of the security procedure while performing this physical search. This was a violation of the NRC-approved Physical Security Plan. Accordingly, we find no basis to withdraw the violation, as originally cited. No additional response is required. The corrective and preventive actions documented in your response will be examined during a future inspection of your licensed program.

Sincerely,

ORIGINAL SIGNED BY
LARRY E. NICHOLSON FOR:

James T. Wiggins, Director
Division of Reactor Safety

Docket No: 50-271

cc w/o encl:

R. McCullough, Operating Experience Coordinator - Vermont Yankee
G. Sen, Licensing Manager, Vermont Yankee Nuclear Power Corporation

cc w/encl:

D. Rapaport, Director, Vermont Public Interest Research Group, Inc.
D. Tefft, Administrator, Bureau of Radiological Health, State of New Hampshire
Chief, Safety Unit, Office of the Attorney General, Commonwealth of Massachusetts
D. Lewis, Esquire
G. Bisbee, Esquire
J. Block, Esquire
T. Rapone, Massachusetts Executive Office of Public Safety
D. Katz, Citizens Awareness Network (CAN)
M. Daley, New England Coalition on Nuclear Pollution, Inc. (NECNP)
State of New Hampshire, SLO Designee
State of Vermont, SLO Designee
Commonwealth of Massachusetts, SLO Designee

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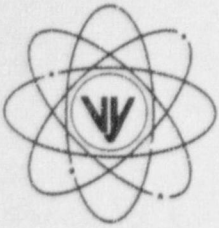
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VERMONT YANKEE NUCLEAR POWER CORPORATION

185 Old Ferry Road, Brattleboro, VT 05301-7002
(802) 257-5271

May 13, 1998
BVY 98-66

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Reference: (a) Letter, USNRC to VYNPC, NRC Inspection Report 50-271/98-05 and Notice of Violation, NVY 98-57, dated April 13, 1998

Subject: Vermont Yankee Nuclear Power Corporation
License No. DPR-28 (Docket No. 50-271)
Reply to a Notice of Violation – NRC Inspection Report 50-271/98-05

This letter is written in response to Reference (a), which documents the findings of an inspection conducted from March 16 to March 19, 1998. The inspection identified two violations of regulatory requirements. Our response to the violations is provided below.

VIOLATION A

10 CFR 73.55 (c) (4) states, in part, "Detection of penetration or attempted penetration of the protected area or the isolation zone adjacent to the protected area barrier shall assure that adequate response by the security organization can be initiated."

Additionally, the NRC-approved Vermont Yankee Nuclear Power Station, Physical Security Plan, Revision 28, dated August 9, 1996, Section 6.3.b, states, in part, that "the inertia guard fence system is designed to detect attempts to climb over, cut through or crawl under the barrier fence with 95% detection confidence."

Contrary to the above, on March 17, 1998, during performance testing of the protected area intrusion detection system, a number of climbing attempts, in multiple locations, were not detected in that no alarm was generated.

This is a Severity Level IV Violation.

RESPONSE:

Reason for the Violation:

Vermont Yankee does not contest this violation. The reason for the violation was that the alarm sensitivity settings for the inertia guard fence system were positioned to detect climbing attempts only of an aggressive nature. Following the upgrade of both the Protected Area fence and the

4805210125 SPO

inertia guard intrusion detection system in 1994, a series of acceptance tests were performed. These tests included climbing attempts as simulated by physically shaking the fence fabric. This criteria was felt to reasonably duplicate the actions of a fast moving intruder(s) attempting to gain unauthorized access to the Protected Area who would encounter the fence barrier, located in an isolation zone, ostensibly covered by closed circuit television. Sensor analyzers were adjusted to detect climbing of an aggressive nature and not that of a more deliberative, less aggressive climber. At the time of the upgrade Vermont Yankee was informed by both the fence vendor and the Cold Regions Research and Engineering Laboratory of the Army Corps. of Engineers that regularly scheduled climbing on the fence or shaking of the fabric was detrimental to the tautness and rigidity of the barrier, necessary for optimum sensor performance. Guidance received from these sources also supported that "tap testing" the fence would sufficiently duplicate climbing attempts and was non destructive to the fence. Actual climb testing and shaking of the fabric was not performed following initial acceptance testing, in deference to "tap testing".

Corrective Steps That Have Been Taken and the Results Achieved:

Compensatory measures for the entire inertia guard fence system were immediately instituted upon demonstration by the regional assist team that deliberative, non aggressive climbing attempts were not being detected. Initial corrective actions to adjust all fence zone sensor analyzers were initiated and completed on the day of discovery, March 17, 1998. Compensatory measures for the entire system remained in place until all zones successfully detected deliberative, non aggressive climbing attempts by a specially selected security force member. A compensatory measure remains in place to address two localized areas. These areas are to be hardened in order to make them impractical for climbing. Completion of hardening measures is scheduled for June 15, 1998.

Corrective Steps That Will Be Taken to Avoid Further Violations:

A specifically defined non aggressive climb test has been incorporated into regularly scheduled operability testing of the system. This test is performed by a specially selected security force member familiar with the operation and capabilities of the inertia guard fence system. A material condition assessment of the fence barrier following each climb test has also been included to ensure for the continued tautness and rigidity of the barrier. "Tap testing" of the fence system will continue to be performed but will no longer be accepted as a test duplicating climb attempts.

Date When Full Compliance Will Be Achieved:

Vermont Yankee achieved full compliance on March 19, 1998 when all zones detected deliberative non aggressive climbing attempts by a specially selected security force member. Although two small localized areas remain in a compensatory action, pending completion of hardening measures, the system as a whole meets requirements as described in the Vermont Yankee Physical Security Plan.

VIOLATION B

10 CFR 73.55 (d)(2) states, in part, "at the point of personnel access into the protected area all hand carried packages shall be searched for devices such as firearms, explosives and incendiary devices or other items which could be used for radiological sabotage."

Additionally, the NRC-approved Vermont Yankee Nuclear Power Station, Physical Security Plan, Revision 28, dated August 9, 1996, Section 5.3, states, in part, that "all hand carried packages shall be searched by x-ray or visually by security personnel in accordance with plant security procedures prior to entry."

Contrary to the above, on March 18, 1998, a test device, (concealed in a backpack) was introduced into the search train, with the licensee's knowledge, and was not detected by the security force member that performed a physical search of the backpack. This created the opportunity to introduce the test device into the protected area.

This is a Severity Level IV Violation.

RESPONSE:

Basis for Disputing the Violation:

Vermont Yankee contests this violation. Vermont Yankee would like the Staff to reconsider the validity of the cited violation. As stated within the violation, Vermont Yankee's NRC approved Physical Security Plan states, in part, that "all hand carried packages shall be searched by x-ray or visually by security personnel in accordance with plant security procedures prior to entry." In accordance with the plan, the test device was appropriately searched by x-ray. Contrary to the inspection report, the x-ray search did not detect any unidentified objects in the backpack. Accordingly, the security force member recognized that a valid search had been conducted and that any additional searches would be in excess of Security Plan requirements. Nonetheless, Vermont Yankee believes that any hand search, whether it be to satisfy the Plan requirements or provide additional margin to the Plan requirements, should be conducted in a complete manner.

In order to evaluate the effectiveness of screening at the point of personnel access into the Protected Area and at the request of the NRC regional assist team, a small test device was hidden with other items in a hand carried bag. With appropriate controls in place the bag was then placed on the x-ray belt for screening. The security officer performing the screening was unaware that the bag contained the test device. The officer viewed the bag as it moved through the x-ray. When the bag had passed through the x-ray the officer opened it, looked inside, moved several items aside, closed the bag and released it. He did not perform an effective hand search of the bag and did not locate the test device. Interviews were conducted with the officer following the assessment. It was concluded that he had not seen anything on the x-ray that would have prompted him to perform a hand search of the bag. As intended by this assessment, the presence of the test device was not readily apparent on the x-ray screen as it passed through. However, the officer stated that he was aware that the bag belonged to an NRC regional assist team member

and decided to take "a quick look in the bag". He was asked why he chose to look in the bag at all since he had not seen anything suspicious on the x-ray screen. The officer expressed a perceived need to do something due to the presence of NRC personnel and Vermont Yankee security management in the Gatehouse. The officer readily acknowledged that the "quick look" he performed into the bag did not meet expectations for a properly performed hand search of a package.

Corrective Steps That Have Been Taken and the Results Achieved:

The x-ray machine involved in this event was immediately removed from service and tested. The machine passed operability tests and was returned to service. The security officer involved in this event was immediately relieved from duties as a search officer. He was extensively interviewed regarding the event, received counseling and attended remedial training emphasizing performance expectations. Special emphasis was placed upon the expectation that once initiated, for any reason, a hand search of any package is to be thorough, extensive and complete. An assessment of hand search practices utilized by other security officers concluded that this event was a failure on the part of an individual officer. All officers assessed were knowledgeable of what constituted a proper hand search of a package. Lessons learned and a reinforcement of performance expectations have been communicated to each individual member of the security force as well as in the "weekly reminder" forum. Several self assessments have been performed of screening activities, with favorable findings.

Corrective Steps That Will Be Taken:

Upon successful completion of remedial training and counseling, the security force member involved in this event has demonstrated competency in the performance of all aspects of his duties; with emphasis on the hand search of packages.

Date When Full Compliance Will Be Achieved:

Vermont Yankee was in compliance due to the valid search of the test device via x-ray.

Additional Information:

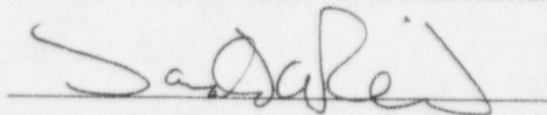
The Staff requested that we address whether the performance problems identified within the inspection report are indicative of a negative trend in overall performance. Vermont Yankee does not believe that the identified violation is indicative of declining performance within the security program. The violation is best characterized as an isolated example in a program which continues to demonstrate an overall commitment to excellence. Opportunities for performance improvement and equipment issues are quickly resolved once identified. A strong performance history, recent regulatory inspections and internal QA audits have provided many examples of a program which sets high standards and aggressively uses self-assessment techniques to assure continuous quality improvement in all areas.

VERMONT YANKEE NUCLEAR POWER CORPORATION

We trust that the enclosed information is responsive to your concerns. Should you have any questions, please contact Mr. Thomas B. Silko at (802) 258-4146.

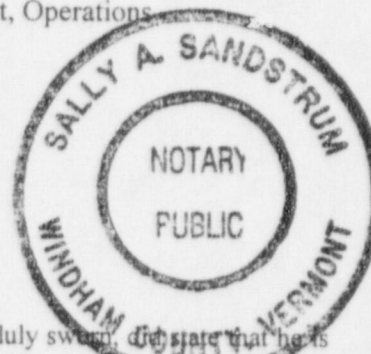
Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION




Donald A. Reid
Senior Vice President, Operations

STATE OF VERMONT)
)ss
WINDHAM COUNTY)



Then personally appeared before me, Donald A. Reid, who, being duly sworn, did state that he is Senior Vice President, Operations of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation, and that the statements therein are true to the best of his knowledge and belief.



Sally A. Sandstrum, Notary Public
My Commission Expires February 10, 1999

cc: USNRC Region 1 Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS
Vermont Department of Public Service
Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001