

## Siemel, Beth

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**From:** Hamer, Mike  
**Sent:** Wednesday, May 19, 2004 2:18 PM  
**To:** Card, John; Ramsdell, Roy; Pelton, David; Siemel, Beth; VTY - Managers; Herron, John T.; Daflucas, Ronda; McElwee, David; Williams, Rob  
**Subject:** NRC Event Notification 40694 update

This message is being re-sent as a pdf file due to difficulties encountered on some computers with opening the tiff file.

The attached NRC Event Notification 40694 update was performed on 5/19/04 at 0945. Please see attached.



NRC Event  
Notification 40694 U.

A-52

## ENTERGY NUCLEAR VERMONT YANKEE

### ENS EVENT NOTIFICATION

**REPORTING CRITERION:** 10 CFR 20.2201(a)(1)(ii)  
10 CFR 74.11(a)  
**REPORT DATE:** May 19, 2004  
**SUBJECT:** Two Fuel Rod Pieces Unaccounted for at Vermont Yankee.

### DESCRIPTION OF EVENT:

On April 20, 2004, Vermont Yankee (VY) determined that two short pieces of spent fuel rods were not in their documented location in the spent fuel pool. An investigation team, consisting of Entergy personnel and industry peers is working to locate the fuel rod pieces. This is being accomplished by completing a review of special nuclear material storage records, performing a thorough, methodical inspection of the spent fuel pool, interviewing current and former VY personnel and contractors and reviewing all radioactive materials shipping records generated since 1979, corresponding to the date that the fuel rod pieces were loaded into the storage container.

The two missing fuel rod pieces are approximately 7 and 17½ inches in length and approximately one half inch in diameter. According to station documentation, in 1979, the highly radioactive rods were placed in a stainless steel container in the spent fuel pool after a fuel inspection to address fuel cladding deficiencies. This container was not designed with sufficient shielding for safe transport outside of an underwater environment such as the spent fuel pool.

VY has an extensive system of radiation monitors on the refuel floor and throughout the station with alarm set points that are capable of alerting control room operators and plant personnel to the uncontrolled movement of highly radioactive material in the protected area. Due to the radioactive nature of the material, the pieces could not have been inadvertently removed from the pool in anything other than a container specifically designed to contain this form of radioactive material. Therefore, there is reasonable assurance that public health and safety is not, nor was ever at risk as a result of this issue. VY will continue to keep the Nuclear Regulatory Commission and state authorities informed on the progress of the investigation.

The portion of the investigation that involves the visual inspection of the pool is essentially completed. That work included searches with pole-mounted and robotic crawler-mounted cameras above and below all the spent fuel storage racks as well as in empty fuel racks and other containers and storage areas. The camera search did not find the unaccounted for fuel rod pieces. Continuing efforts include, but are not limited to, document reviews and extensive interviews with approximately 65 present and former employees and contractors who have been associated with spent fuel pool and radioactive waste disposal operations over the years.

The State of Vermont and the US Nuclear Regulatory Commission (NRC) are actively providing oversight for this project.

### PREVIOUS EVENT NOTIFICATION INFORMATION

**USNRC EVENT NUMBER:** 40694  
**REPORT DATE AND TIME:** April 21, 2004 at 18:00  
**REPORTING CRITERION:** 10 CFR 50.72(b)(2)(xi)

ENTERGY NUCLEAR VERMONT YANKEE

ENS NOTIFICATION (cont.)

PREPARED BY: Michael J. Hamer 5-19-04  
Michael J. Hamer Date  
Technical Specialist  
Licensing Department

RECOMMENDED BY: Jim Devincitis 5-19-04  
Jim Devincitis Date  
Licensing Manager

APPROVED BY: Kevin H. Bronson 5/19/04  
Kevin Bronson Date  
General Manager

COMPLETED BY: Kelly Robinson 15/19/04 - 0945  
Sign Name Date/Time  
Kelly Robinson  
Print Name

Note: Return completed original document to Licensing personnel to be filed with Condition Report CR-VTY-2004-01339.