

[REDACTED]

NOTICE OF VIOLATION

Nuclear Fuel Services, Inc.
Erwin, TN

Docket No. 70-143
License No. SNM-124

During an NRC inspection from November 1 through 5, 2004, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

Safety Condition No. S-1 of Special Nuclear Material License No. 124 requires that material be used in accordance with the statements, representations, and conditions in the license application dated July 24, 1996, and supplements thereto.

- A. Section 2.7 of the license application requires that SNM operations and safety function activities at the Nuclear Fuel Services facility be conducted in accordance with written and approved procedures.

Step 4.10.3 of licensee procedure NFS-HS-CL-27, "Nuclear Criticality Safety [REDACTED] OCB/EPB," Revision 3, dated December 14, 2004, requires bags be opened for the minimum time necessary to perform the task. Otherwise, unfavorable geometry bags shall be kept flat, closed (by hand), sealed, or have the bottoms cut out leaving two openings in the bag [REDACTED].

Contrary to the above, on and before December 14, 2004, the licensee failed to comply with the unfavorable geometry bag handling requirements of NFS-HS-CL-27. Specifically, the licensee did not close, modify, or remove the unfavorable geometry bag from the area upon completion of the activity which required the use of the bag.

This is a Severity Level IV violation (Supplement VI).

[REDACTED]

[REDACTED]

- B. Section 4.2.3 of the license application requires that the k-effective for a failure or a single contingency not exceed 0.95, including bias and uncertainty.

Scenario 4.1.7 of 54X-04-0001, [REDACTED] identifies the introduction of more reactive materials [REDACTED] as a failure or single contingency.

Contrary to the above, on March 9, 2004, Scenario 4.1.7 failed to ensure that the introduction of the more reactive materials [REDACTED] would not result in a k-effective exceeding 0.95. Specifically, Scenario 4.1.7's analysis did not consider optimal placement of the more reactive material.

This is a Severity Level IV violation (Supplement VI).

- C. Section 4.1.1 of the license application requires that all process equipment and systems be designed to incorporate sufficient factors of safety to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality is possible.

Scenario A, Sequence 12 of NCSE 54T-04-0014, Revision 2, dated April 2, 2004, identifies the requirement to demonstrate by way of dual samples and analyses that the [REDACTED] liquid waste effluent is released from favorable geometry hold columns to unfavorable geometry tanks.

Contrary to the above, on October 25, 2004, the licensee released liquid waste effluent from the Caustic Discard hold columns without the demonstration that the U^{235} concentration was less than [REDACTED].

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Nuclear Fuel Services, Inc., is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with copies to the Regional Administrator, Region II, and the Chief, Technical Support Group, Division of Fuel Cycle Safety and Safeguards, NMSS, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence if the correspondence adequately addresses the required response.

[REDACTED]

If an adequate reply is not received within the time specified in this Notice, an Order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other actions as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

[REDACTED]

[REDACTED] In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated at Rockville, Maryland

this 10th day of February 2005

[REDACTED]