

September 18, 2008

Ms. B. Marie Moore, Vice President
Safety and Regulatory
Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON CHANGES TO
FUNDAMENTAL NUCLEAR MATERIAL CONTROL PLAN FOR HIGH
ENRICHED URANIUM (TAC L32685)

Dear Ms. Moore:

This letter is in response to your letter dated May 30, 2008, transmitting Section 1, Revision 24, to the Fundamental Nuclear Material Control Plan for high enriched uranium. Our review has identified that additional information is needed before your request can be approved.

The additional information specified in the enclosure should be provided to us within 30 days from the date of this letter. Please reference the above TAC number in your response.

If you have any questions concerning this letter please contact me at (301) 492-3123, or via email to kevin.ramsey@nrc.gov.

In accordance with 10 CFR 2.390 of the U.S. Nuclear Regulatory Commission's (NRC) "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Agency-wide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Kevin M. Ramsey, Project Manager
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

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

Enclosure: Request for Additional Information

Ms. B. Marie Moore, Vice President
Safety and Regulatory
Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650

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DATE	09/17/08	09/18 /08	09/18 /08

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Request for Additional Information
High-Enriched Uranium Fundamental Nuclear Material Control Plan
Revision 24 - Submittal Dated May 30, 2008
Nuclear Fuel Services Erwin Facility
Docket No. 70-143

The following comments and positions on outstanding review issues are based on pertinent regulations and regulatory guidance. If your position on any issue differs, you should provide an acceptable rationale and appropriate alternative approach for satisfying performance objectives and system capability needs.

Please provide the following information in your Fundamental Nuclear Material Control Plan:

1. The research and development operations in Buildings 110 and 131 do not qualify for exemption from the process monitoring requirements of 74.53(c)(1) and (2). Provide the description of the abrupt loss detection capabilities for these operations, including the lot/batch characterization and material balance tests. Refer to Chapter 1.2, pages 18 through 20 of NUREG-1280, Revision 1, for guidance.
2. Consistent with the process monitoring activities for Buildings 110 and 131, provide a description of the Material Control and Accounting alarm resolution program in accordance with the requirements of 74.57.
3. The Plan change states that Buildings 110A, 110B, 110D, and 131 contain multiple workstations. In each building, provide the exact number of workstations and the total material quantity for throughput operations.
4. Provide the description for handling, classifying, and controlling materials and items at each workstation (in Buildings 110A, 110B, 110D, and 131) in order to remain within the 350-gram U-235 limit. Discuss the control measures that will be undertaken in the event of any occurrence exceeding the quantity limit.
5. Provide the description for monitoring and controlling Buildings 110A, 110B, 110D and 131 to ensure that the material quantity does not exceed a formula quantity. Discuss the control measures that will be undertaken in the event of any occurrence exceeding the quantity limit.
6. Indicate whether the item loss detection capabilities and item monitoring requirements are maintained for Buildings 110A, 110B, 110D, and 131 (Material Balance Area 7) in accordance with the requirements of 74.55.