



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

July 30, 2009

Mr. David L. Kudsin  
President  
Nuclear Fuel Services, Inc.  
P.O. Box 337, MS 123  
Erwin, TN 37650

SUBJECT: INTRODUCTION OF URANIUM HEXAFLUORIDE INTO THE COMMERCIAL DEVELOPMENT LINE

Dear Mr. Kudsin:

By letter dated May 11, 2009, the NRC issued License Amendment 88 to License No. SNM-124 which authorized the operation of your proposed Commercial Development (CD) Line subject to License Condition S-54. License Condition S-54 specifies that introduction of uranium hexafluoride ( $\text{UF}_6$ ) into the CD Line shall not occur until the Commission completes an operational readiness review (ORR) to verify that: (1) commitments in the amendment request have been fulfilled, (2) management measures for items relied on for safety (IROFS) have been implemented, (3) the CD Line has been constructed in accordance with design requirements, and (4) other actions necessary for safe operations are complete.

The NRC has reviewed the actions taken by Nuclear Fuel Services (NFS) to fulfill the elements of License Condition S-54. Of particular note, the NRC conducted an ORR inspection between June 1 and July 8, 2009. A public exit meeting with NFS regarding the results of the ORR was held in Erwin, TN, on July 22, 2009, and the ORR inspection report (IR) 70-143/2009-009 was issued on July 24, 2009 (ADAMS Accession Number: ML09205050562). On the basis of the ORR inspection, the NRC confirmed the completion of elements 2, 3 and 4 of License Condition S-54.

With respect to element 1 of License Condition S-54, the NRC identified and reviewed the commitments NFS made in its License Amendment Request. The specific commitments referred to, and the NRC's verification of the completion of the commitments, is documented in a memorandum from K. Ramsey, NMSS, to File, "Confirmation of Commitments in Amendment 88 to Perform Actions before Starting Operations in the New CD Line," dated July 28, 2009 (ADAMS Accession Number: ML092090175) and in a memorandum from C. Payne to L. Reyes, "Confirmation of Commitments in Amendment 88 of License SNM-124 to Perform Actions Before Introduction of  $\text{UF}_6$  into the Commercial Development (CD) Line," dated July 29, 2009 (ADAMS Accession Number: ML092100364).

The NRC has concluded that NFS has met the elements of License Condition S-54 to License No. SNM-124 and accordingly, authorizes NFS to introduce  $\text{UF}_6$  into the CD Line. Prior to the introduction of  $\text{UF}_6$  into the process line, inform the NRC of the estimated date and time when the material introduction will occur to allow the appropriate scheduling of NRC inspection staff.

With respect to the issue identified in IR 70-143/2009-009 regarding the potential for excessive temperatures in transparent polyvinyl chloride (TPVC) components associated with the hydrogen peroxide removal column, NFS took steps to isolate this feature from the CD Line process. As stated in paragraph 2.b.(1) of the ORR IR, the inspectors reviewed the licensee's actions and had no further issues. NFS has stated that the lack of capability to remove hydrogen peroxide from process solutions will have no adverse impact on the safe operation of the CD Line. Should NFS determine in the future that it is desirable to use this portion of the process; prior to restoring the hydrogen peroxide removal capability to service NFS should provide its documented technical resolution of this issue to NRC, sufficiently in advance, to allow appropriate review of your basis for operating this process feature.

We appreciate your cooperation in this matter. Please provide the above requested information to Steve Burris as it becomes available. If you have any questions regarding the foregoing, please call Charles Payne at 404-562-4711.

Sincerely,

/RA/

Luis A. Reyes  
Regional Administrator

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

cc:     Timothy Lindstrom  
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Letter to David L. Kudsin from Luis a. Reyes dated July 30, 2009

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Distribution:

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PUBLIC

OCA

\*see previous concurrence

PUBLICLY AVAILABLE

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SENSITIVE

NON-SENSITIVE

ADAMS:  Yes ACCESSION NUMBER: \_\_\_\_\_

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