



**Global Nuclear Fuel**

A Joint Venture of GE, Toshiba & Hatachi

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March 21, 2006

Attn: Document Control Desk  
Director, Office of Nuclear Material Safety and Safeguards  
Incident Response  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Washington, D.C. 20555-0001

Subject: Reply to Notice of Violation

References: 1) NRC License SNM-1097, Docket 70-1113  
2) NRC Inspection Report 70-1113/2005-202, 7/22/05  
3) NRC Inspection Report 70-1113/2006-201, 2/24/06

Global Nuclear Fuel – America’s facility, in Wilmington, N.C., hereby responds to the Notice of Violations dated February 24, 2006. The two reported violations resulted from an NRC team inspection conducted at our licensed fuel fabrication facility January 23 – 27, 2006 by Inspectors N. Jordan and D. Morey.

Pursuant to 10CFR2.201, our reply to the items of apparent noncompliance with NRC requirements is provided as Attachment 1 to this letter. The NRC inspection report comments and suggestions are helpful to us in our constant efforts to improve our programs, to ensure continued health and safety of plant personnel, and to ensure our compliance with NRC regulations and licensed conditions.

Neither your inspection report (referred to above) nor our response contains information that we believe to be proprietary. We also welcome further discussion with your staff on our reply, as you deem appropriate.

Please contact me on (910) 675-5656 if you wish to discuss this matter further.

Sincerely,  
Global Nuclear Fuel - Americas

C. M Vaughan  
Manager, Facility Licensing

Attachment

cc: CMV-06-030  
Chief, Technical Support Group, Fuel Cycle Safety and Safeguards, NMSS  
Regional Administrator, Region II

### Attachment 1

The information given below refers to the Notice of Violations dated February 24, 2006, relative to NRC Inspection Report 70-1113/2006-201.

#### Violation (70-1113/2006-201-02)

**Safety Condition No. 1 of License No. SNM-1097 requires that licensed materials be used in accordance with statements, representations, and conditions in the license application dated June 5, 1997, and December 7, 1999, and supplements thereto.**

- A. Section 6.1.3 of the license application states, in part, that each area manager is responsible for developing and maintaining operating procedures that incorporate limits and controls established by the criticality safety function.**

**Contrary to above, as of January 25, 2006, the licensee was operating under a temporary operating procedure that did not implement a credited safety control required by approved criticality safety analyses. Specifically, the temporary operating procedure failed to require aging of waste boxed for 60 days prior to the uranium content verification by elephant-gun (E-GUN) scan.**

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

#### GNF-A Response to Violation:

GNF-A disagrees with this cited violation.

GNF-A is confused by the citing of a violation in this case because the issue was already a part of IFI 2005-202-01, for which corrective actions were active in our management tracking system and the corrective actions were being accomplished in accordance with the management system for configuration management approved in the license.

IFI 2005-202-01 recognized that double contingency had been established for waste-box handling but identified the fact that there was some lack of clarification in the then current consolidated waste-box criticality analysis; however, this did not constitute a violation of the license. As a result of this observation and in accordance with GNF-A practice (P&P 40-12), UIR PP&SS-0519 was opened in the management tracking system and a corrective program consisting of the following actions was opened.

- Issue Temporary Operating Procedure (TOP) requiring 4-foot spacing until an updated Criticality Safety Analysis (CSA) is performed and Nuclear Safety Release/Requirements (NSR/R) implemented.
- Perform a Higher Level Critique (HLC) of the root cause and corrective action determinations.
- Initiate Change Request (CR) to revise waste box storage analysis to clarify the control scheme and associated NSR/Rs.
- Revise generic waste box storage analysis
- Review the ISA to determine if changes are required.
- Revise Operating Procedures (OP) per CSA/NSR/R.
- Manager Nuclear Safety to review incident with nuclear safety engineers with emphasis on not issuing NSR/Rs until CR are completed.

- **Manager Fuel Manufacturing Operations review incident with operations staff that are designated Area Engineers and Area Managers.**

At the time of inspection 2006-201 the above corrective action program was still open and being processed in accordance with our licensed program for configuration management. This change management process is implemented according to the following outline of steps.

- **A formal Change Request (CR) is initiated in accordance with internal procedure P/P 10-10.**
- **CR is approved and logged into the configuration management system (CMC).**
- **CR is integrated through the ISA requirements (P/P 10-20) and functional units perform necessary tasks (includes the CSA, NSR/R, OPs and a number of other items).**
- **Pre-operational requirements are established.**
- **Upon completion of all work including the pre-operational requirements the CR is approved for operation by the Area Engineer, Area Manager and Manager NSE.**
- **Approved to Operate CR packages are forwarded to Configuration Management Center (CMC).**
- **CR files are closed by CMC who verifies that all required documents are completed and in the files within 30-days of the Approval to Operate date.**

The Change Request issued to address the consolidated waste-box situation is CR#2005298. The CR is required to be processed in accordance with our internal procedure (P/P 10-10) and the criticality safety analysis (CSA) is only a portion of managing configuration as shown above. At the time of the inspection the CSA revision had been completed, however, the implementation steps had not been completed. Confirmation of the waste-box measurement (Elephant Gun) capability, effects of 60-day aging and details of clarification between the CSA, NSR/R and the OPs were being worked out. The waste-box handling was being conducted under the authorization of a Temporary Operating Procedure (TOP) as is authorized in our system of management controls and which had been approved by the Nuclear Safety Function and all other functions required by procedure. Double contingency was being met.

Subsequent to the 2006 inspection, CR#2005298 has been completed, approved for operation February 9, 2006 and fully implemented. This includes the waste-box criticality safety analysis (rev. 03), the ISA review, revised NSR/R, OPs, verification of installation and preoperational audit postings, operator training and a verification that all waste-boxes that have not been Elephant Gun scanned after 60-days aging are being stored in low density arrays (1-foot edge-to-edge spacing).

Therefore GNF-A believes that compliance has been maintained throughout this change process that was occurring during the inspection and completed February 9, 2006. With the completion of this work, the subject of IFI 2005-202-01 has also been adequately addressed.

**Violation (70-1113/2006-201-03)**

- B. Section 3.9 of the license application states, in part, that licensed material processing or activities will be conducted in accordance with properly issued and approved practices and procedures, plant procedures, or operating procedures.**

**Contrary to above, as of January 25, 2006, the licensee displayed an NCS posting in the waste box storage area corresponding to a criticality safety analysis which had been cancelled.**

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

**GNF-A Response to Violation:**

GNF-A concurs with the violation.

The NSR/R (Rev. 04) was incorrectly posted to cover waste-box operations. This resulted from an administrative error in handling change request CR#2004149 which had originally been opened to update and consolidate the criticality safety analysis for the waste-box handling operations. CR#2004149 was canceled part of the way through the implementation process, however, the associated NSR/R (Rev. 04) was posted by mistake.

While the administrative error did occur, it is important to note that from a safety standpoint the NSR/R requirements of NSR/R (Rev. 03), which should have remained posted until properly changes in the configuration management process, contained exactly the same technical requirements as NSR/R (Rev. 04) that was posted at the time of the inspection [reference to the 300 grams U235 was removed since the NDA measures total U see below:

Rev. 03 – "Wasteboxes are limited to 300 grams u-235 or 6.06 kg total uranium"  
Rev. 04 – "Wasteboxes are limited to 6.06 kg total uranium"

Because of the low safety significance noted here and in the inspection report, and because GNF-A had an open and active change request (CR#2005298) open and in process at the time of the inspection, this item might have more accurately been characterized as a non-cited violation (NRC Enforcement Policy – VI, A., 8.).

Change Request CR#2005298 was opened to replace the canceled CR#2004149 and to respond more thoroughly to IFI 2005-202-01 as discussed under Violation A. Work on this CR was still in progress during this inspection. Subsequent to this inspection the work on CR#2005298 has been completed and fully implemented. This included as part of the procedural requirements the posting of the correct NSR/R s supporting the change. NSR/R (Rev. 5) has been posted as of February 9, 2006.

The internal procedure requirement now stipulates that NSR/Rs may not be formally issued until all requirements for approval to operate have been satisfied. This should guard against an NSR/R being posted before a CR is completed. Internal audits have identified no additional problems of this nature.

GNF-A is currently in full compliance.