



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

October 1, 2007

Mr. J. D. Fuller  
Chief Executive Officer and Facility Manager  
Global Nuclear Fuel - Americas, L.L.C.  
P. O. Box 780  
Wilmington, NC 28402

SUBJECT: NRC INSPECTION REPORT NO. 70-1113/2007-002

Dear Mr. Fuller:

This refers to the results of the above-referenced Nuclear Regulatory Commission (NRC) inspection conducted at your Wilmington facility on August 13-17, 2007. A re-exit was conducted on September 13, 2007 to communicate our intent to further investigate actions taken to address the exclusion of a control from the ISA as well as the extent of condition investigation.

As a result of the inspection, the enclosed NRC Form 591FF, SAFETY INSPECTION, is being issued. The enclosed form indicates that no violations were identified during the above described inspection of your licensed activities. Please retain the form in your files. No acknowledgment of this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Thank you for your cooperation. If you have any questions, please call me at (404) 562-4731.

Sincerely,

**/RA/**

Jay L. Henson, Chief  
Fuel Facility Inspection Branch 2  
Division of Fuel Facility Inspection

Docket No. 70-1113  
License No. SNM-1097

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl: (See page 2)

J. Fuller

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cc w/encl:  
Scott Murray, Manager  
Facility Licensing  
Global Nuclear Fuel - Americas, L.L.C.  
P. O. Box 780, Mail Code J26  
Wilmington, NC 28402

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

OFFICE	RII:DFFI	RII:DFFI					
SIGNATURE	JJ 9/6/07	RG 9/12/07					
NAME	JJimenez	RGibson					
DATE	10/ /2007	10/ /2007	10/ /2007	10/ /2007	10/ /2007	10/ /2007	10/ /2007
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY      DOCUMENT NAME: C:\FileNet\ML072740500.wpd

**NRC FORM 591FF PART 1**  
 (11-2005)  
 10 CFR 2.201

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED: Global Nuclear Fuels - Americas, L.L.C. P. O. Box 780 Wilmington, NC 28402 REPORT 70-1113/2006-001		2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region II, Division of Fuel Facilities Inspection 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303	
3. DOCKET NUMBER(S) 70-1113	4. LICENSEE NUMBER(S) SNM-1097	5. DATE(S) OF INSPECTION 08/13-17/2007	

**LICENSEE:**

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed. See list of items opened and closed on NRC Form 591FF Part 3.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy to exercise discretion were satisfied.

\_\_\_\_\_ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

- 4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE	Not Applicable		
NRC INSPECTOR	Jose Jimenez	/RA./	9/6/2007

**SAFETY INSPECTION REPORT  
AND COMPLIANCE INSPECTION**

1. LICENSEE

**Global Nuclear Fuels - Americas, L.L.C.  
P. O. Box 780  
Wilmington, NC 28402**

2. NRC/REGIONAL OFFICE

**U.S. Nuclear Regulatory Commission  
Region II, Division of Fuel Facilities Inspection  
61 Forsyth Street, Suite 23T85  
Atlanta, GA 30303**

REPORT NUMBER(S):

3. DOCKET NUMBER(S):

**70-1113**

4. LICENSE NUMBER(S):

**SNM-1097**

5. DATE(S) OF INSPECTION:

**08/13-17/2007**

6. INSPECTOR(S): Jose Jimenez

7. INSPECTION PROCEDURES USED: **88035, 86740**

**SUPPLEMENTAL INSPECTION INFORMATION**

**Executive Summary**

The GNF Facility fabricates low-enriched uranium fuel for use in commercial reactors. During the period of the inspection, all operations were normal.

This was a routine, announced inspection that included observations and evaluation of the plant's radiological waste management and transportation programs. The inspection involved observations of work activities, reviews of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

**Radiological Waste Management**

- Review of plant policies and procedures demonstrated the licensee has in place an adequate organizational structure for handling radiological waste. Responsibilities and expectations are clearly stated for personnel involved in these activities.
- As demonstrated by the inspector's review of recent audits and self assessments performed by the licensee in the Scrap Packaging, Storage Pads, Waste Treatment Facility, and Radiation Waste areas conducted since the beginning of the year, members of the audit team, areas selected for review and handling of issues identified were in compliance with requirements in 10CFR 61.56.
- The inspector reviewed waste classification, characterization and form records and walked down selected waste generation points and storage areas and noted the licensee was in compliance with requirements set forth in 10CFR 61.55(a)(2), 10CFR 61.56 and Appendix G to 10CFR 20.
- Waste being shipped was properly packaged and labeled in accordance with procedures; review of records showed shipment records were correctly completed, filled and signed by the responsible person.

- The inspector verified that waste being shipped to the disposal facility was tracked and that a procedure was in place to ensure receipt of shipment and acknowledgment of receipt that indicated the shipment was in agreement with the prepared waste manifest. The inspector reviewed the agreements for the disposal site, procedures for handling the waste to be shipped and records of these shipments. This review showed that the licensee was in compliance with the conditions specified by their licensee for a disposal site.
- The inspector observed activities for handling solid waste and interviewed operators to determine that the licensee had adequate controls in place to ensure proper surveys of quantities possessed, how long a waste container had been stored, location for accountability, effluent sampling and radiological surveys of storage areas and containers. The licensee showed they were in compliance with the regulations regarding proper caution signs for the storage areas, use of authorized containers, correct identification of radio isotopic composition and maintenance of activities and transactions records.

### **Transportation**

- Transportation activities involving the shipment and receipt of UF6 cylinders and reactor fuel products were conducted in accordance with the requirements of the license. The licensee ensured all the appropriate documentation accompanied all the packages being shipped. The licensee adequately recorded the required information on the packaging and shipping orders including the transportation index, package activity, labeling, and placards.
- The computerized procurement management system validated that information pertaining to material being shipped matched the Department of Transportation (DOT) /NRC requirements for labeling, placarding and shipping papers.
- The certificates of compliance for cylinders processed onsite as well as packages used for fuel bundle transportation were current, including all the necessary design information and packaging criteria. Inspections of cylinders, empty fuel packages and over packs, and any return fuel from customers received onsite were being conducted in accordance with procedure requirements.
- Personnel responsible for the shipment and receipt of material were knowledgeable of NRC, DOT, and applicable plant procedure requirements. Quality assurance audits were conducted in accordance with license requirements. No issues were identified.

### **Event Follow-up**

- The inspector reviewed actions taken by the licensee to address issues identified as a result of two reported events. The first concerned event no. 43439, "IROFS did not prevent incorrect type of additive from being added under all scenarios." The inspector toured the area, reviewed the process procedure and interviewed operators and managers responsible for the area. The inspector determined that the process procedure indicated that only Ammonium Oxalate (AO) is to be used with Blend-Only blend. It was determined by the licensee that the most probable cause was an operator did not follow the procedure and added Acrawax (WX) instead of AO. According to the licensee, at no time did an unsafe condition exist because criticality safety depends on mass controls not on the type of additive used. Since then the licensee has clarified the description of this IROFS to specify that the amount of additive is the safety parameter controlled. However, the inspector determined that the failure of an operator to follow the procedure constituted a violation

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of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC's enforcement policy. The licensee presented their investigation findings and proposed short and long term corrective actions. Based on all the information gathered, the licensee has properly characterized the weakness in the ISA and has made the necessary changes to correct the IROFS. This revision will be evident with the submittal of ISA changes to the NRC next year. This event can be closed.

- Event no. 43542, "Failure to update ISA summary regarding controls associated with the container transfer station in the Dry Scrap Recycle area." The inspector verified that the controls were in place and that available procedures reflected the presence of these controls. Personnel that work in the area knew these controls were present in the equipment. At the time of the inspection, the equipment was shut down, pending management approval of the ISA summary. Even though the control was in place and in working condition, the licensee could not provide evidence that the required management measures associated with this IROFS would have taken place as a result of this control not being included in the ISA summary. Management measures normally include proper maintenance and surveillance, proper safety review in case of equipment or process change, assurance of configuration control, IROFS failure trends, etc. This issue is going to be followed as URI 0701113/2007002-01, while the licensee is investigating the extent of condition for any other instances where controls may not have been not included in the ISA and the effects of not having these controls in their ISA documentation regarding their reliability.

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