



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

November 19, 2008

Ms. Lisa M. Price  
Chief Executive Officer and Facility Manager  
Global Nuclear Fuels - Americas, L.L.C.  
P.O. Box 780  
Wilmington, NC 28402

SUBJECT: NRC INSPECTION REPORT NO. 70-1113/2008-006

Dear Ms. Price:

This refers to the inspection conducted from October 20,- 23, 2008, at the Global Nuclear Fuels – Americas, L.L.C. (GNF-A) facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on October 23, 2008, the inspectors discussed the findings with members of your staff.

As a result of the inspection, the enclosed NRC Form 591FF, Safety Inspection Report, Parts 1 and 3, is being issued. The enclosed form indicates that no violations were identified during the inspection of your licensed activities. Please retain the original form for your files.

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>.

Should you have any questions concerning this letter, please contact us.

Sincerely,

**/RA/**

Daniel W. Rich, Chief  
Fuel Facility Inspection Branch 3  
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)

L. Price

2

cc w/encl:  
Scott Murray, Manager  
Facility Licensing  
Global Nuclear Fuels - Americas, L.L.C.  
Electronic Mail Distribution

Beverly Hall, Chief  
Radiation Protection Section  
N.C. Department of Environmental Commerce & Natural Resources  
Electronic Mail Distribution

Distribution w/encl:

D. Rich, RII  
R. Gibson, RII  
P. Habighorst, NMSS  
M. Adams, NMSS  
N. Baker, NMSS  
PUBLIC

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

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

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI			
SIGNATURE	GW 11/5/08	JP for 11/13/08	JP 11/13/08	RG 11/5/08			
NAME	G Woodruff	M Thomas	J Pelchat	R Gibson			
DATE							
E-MAIL COPY?	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO

**SAFETY AND COMPLIANCE INSPECTION REPORT**

1. LICENSEE OR CERTIFICATEE/LOCATION INSPECTED: <b>Global Nuclear Fuels - Americas, L.L.C.</b> <b>P.O. Box 780</b> <b>Wilmington, NC 28402</b>	2. NRC/REGIONAL OFFICE: <b>U.S. Nuclear Regulatory Commission</b> <b>Region II</b> <b>61 Forsyth Street, Suite 23T85</b> <b>Atlanta, GA 30303</b>	
REPORT NO: <b>2008-006</b>		
3. DOCKET NUMBER(S): <b>70-1113</b>	4. LICENSE OR CERTIFICATEE NUMBER: <b>SNM-1097</b>	5. DATE(S) OF INSPECTION: <b>October 20 – October 23, 2008</b>

6. INSPECTION PROCEDURE(S) COMPLETED: 88035, 86740, and 88025

**LICENSEE OR CERTIFICATEE: Global Nuclear Fuels – Americas, L.L.C.**

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

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. Reported events reviewed
- 4. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were non-repetitive, licensee-identified, and corrective action was 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):

- 5. 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)

**Statement of Corrective Actions**

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/CERTIFICATEE			
NRC INSPECTOR	John Pelchat, Mary Thomas	/RA/	11/13/08

**DOCKET FILE INFORMATION  
SAFETY AND COMPLIANCE INSPECTION REPORT**

1. LICENSEE OR CERTIFICATEE/LOCATION INSPECTED: <b>Global Nuclear Fuels - Americas, L.L.C. P.O. Box 780 Wilmington, NC 28402</b>		2. NRC/REGIONAL OFFICE: <b>U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303</b>	
REPORT NO: <b>2008-006</b>			
3. DOCKET NUMBER(S): <b>70-1113</b>	4. LICENSE OR CERTIFICATEE NUMBER: <b>SNM-1097</b>	5. DATE(S) OF INSPECTION: <b>October 20 – October 23, 2008</b>	

6. INSPECTOR(S): John Pelchat, Mary Thomas (accompanied by Gena Woodruff)

7. INSPECTION PROCEDURES USED: 88030 and 88020

**SUPPLEMENTAL INSPECTION INFORMATION**

**EXECUTIVE SUMMARY**

**Summary of Plant Status**

Global Nuclear Fuels Americas LLC (GNF-A) converts UF<sub>6</sub> to UO<sub>2</sub> and fabricates low-enriched fuel for use in commercial nuclear power reactors.

This routine, announced inspection included observations and evaluations of the licensee's radiation protection program. The inspection involved walk downs of the facility, observation of licensed activities, reviews of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

**Radiation Protection**

- The implementation of the As Low As Reasonably Achievable (ALARA) program was adequate. The inspector reviewed the 2007 annual ALARA review, the first and second quarter Wilmington Safety Review Committee (WSRC) presentations, and the minutes from monthly ALARA meetings and noted an upward trend in collective dose. The licensee determined that operational changes requiring operators to spend increased time in the production area caused this dose increase. To address this issue, the licensee planned to engineer process changes to keep doses ALARA. Although collective dose increased an average of 40% from 2007, individual doses remained well below 10 CFR Part 20.1201 limits.
- Based on a random sampling of routine surveillance records, observation of radiation technicians performing surveys, analysis of survey frequency, and interviews with licensee personnel, no issues were identified in the area of radiation surveys.
- The inspectors reviewed the licensee's methodology for assigning internal dose, through air sampling, urinalysis, and lung counting. The inspector observed the routine collection of air samples and the processing of urine samples and found that the licensee implemented their internal exposure program in accordance with license requirements. No exposures exceeded the occupational limits in 10 CFR Part 20.1201.

## Executive Summary (Cont.)

- The inspectors reviewed the external dosimetry records and procedures and found no issues with the external exposure monitoring program. No exposures exceeded the occupational limits in 10 CFR Part 20.1201.
- The inspectors reviewed procedures governing the respiratory protection program, discussed respirator training and fit testing, observed operator use of respirators, and observed the respirator cleaning process and found that the licensee conducted the respiratory protection program in accordance with license requirements.
- Notices and postings required by 10 CFR Part 19 and 21 were properly posted.

### Operational Safety

- The inspectors reviewed portions of the integrated safety analysis (ISA) for the UO<sub>2</sub> Pellet Press and the Gadolinium (Gad) Production Areas. The inspectors determined that the associated Items Relied On For Safety (IROFS) were being implemented and maintained to meet performance criteria in accordance with the licensee's ISA document.
- Licensee personnel demonstrated adequate knowledge of process operations, safety controls, and applicable procedures for the UO<sub>2</sub> pellet press and the Gad production areas.
- The inspectors observed multiple operations in the UO<sub>2</sub> pellet press and the Gad production areas and determined that they were performed in accordance with applicable operations procedures.
- The inspectors reviewed unresolved item (URI) 70-1113/2008-01-01, to determine the adequacy of the functional test instructions (FTI) of the IROFS for the Gad slugger feed hood and the Gad slugger hood. When the issue was identified during the previous operational safety inspection, ISA Revision 10 identified functions which were not required for nuclear safety. The inspectors reviewed the most recent ISA revision (Revision 11) and noted that references to functions not required for nuclear safety were removed, which adequately addressed the issue. This item is closed.

### Exit Meeting Summary

- The inspection scope and results were summarized on Thursday, October 23, 2008 with Scott Murray, and members of your staff. The inspectors asked the licensee staff whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

### Key Points of Contact

<u>Name</u>	<u>Title</u>
K. Maloy	Manager, Radiation Protection
A. Mabry	Radiation Safety Program Manager
S. Fuller	GNF-A COO
H. Knight	Manager, Fuels EHS
A. Vexler	FMO Operations Manager
J. Zino	Manager, GNF-A Criticality Safety

**List of Items Opened, Closed, Discussed**

<b><u>Item Number</u></b>	<b><u>Status</u></b>	<b><u>Description</u></b>
2008-01-01	Closed	Review adequacy of an IROFS FTI to demonstrate compliance with ISA specifications