

**INSPECTION REPORT**

1. LICENSEE OR CERTIFICATE HOLDER/LOCATION INSPECTED: 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 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303-8931	
REPORT NO: 2009-011			
3. DOCKET NUMBER: 70-1113	4. LICENSE OR CERTIFICATE NUMBER: SNM-1097	5. DATE(S) OF INSPECTION: December 14, 2009 – December 17, 2009	

LICENSEE OR CERTIFICATE HOLDER:

The inspection was an examination of the activities conducted under your license or certificate as they relate 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 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.
- 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 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):

- 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)

LICENSEE OR CERTIFICATE HOLDER STATEMENT OF CORRECTIVE ACTIONS FOR ITEM 5, ABOVE

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violation(s) 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 the NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE/CERTIFICATE HOLDER REPRESENTATIVE			
NRC INSPECTOR	R. Gibson/D. Hartland/P. Glenn	/RA by RGibson for/	1/11/2010

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6. INSPECTOR(S): R. Gibson, D. Hartland, P. Glenn

7. INSPECTION PROCEDURES USED: 88070 and 88050

### EXECUTIVE SUMMARY

#### Summary of Plant Status

The Global Nuclear Fuel - Americas L.L.C (GNF-A) facility converts uranium hexafluoride into uranium dioxide for fabrication into low-enriched fuel for use in commercial nuclear power reactors. During the inspection period, normal production activities were ongoing. This routine, announced inspection included evaluation of the permanent plant modification and the emergency preparedness programs. The inspection involved observation of work activities, a review of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

#### Permanent Plant Modifications (88070)

- The inspectors reviewed the following change requests (CRs) to determine if the design information and safety analyses were in compliance with required design criteria:

CR 4054, Declare hydrofluoric acid sense and flee IROFS  
CR 3917, New gad slugger installation  
CR 3999, Addition of new initiating event for cold trap rupture  
CR 3653, Remove 30B Cylinder as sole IROFS

During review of CR 3653, the inspectors noted that the licensee's removal of the 30B cylinder as a sole IROFS (# 101010) was because it did not consider the rupture of a cylinder containing liquid UF<sub>6</sub> as a credible event due to the rigorous DOT requirements for testing the cylinders. The licensee did not provide further documented justification during the inspection, and the inspectors were not aware of any testing that demonstrated a cylinder containing liquid UF<sub>6</sub> could not rupture if dropped. In light of the inspector's observations, and also in response to an ongoing enforcement action currently under NRC review, (reference NRC Inspection Report 070-1113/2009-010, ADAMS ML093100078) the licensee agreed to re-assess its determination that the cylinder rupture scenario was not credible. The inspector's review of the licensee's re-assessment of the credibility of a 30B cylinder rupture is an unresolved item, (URI 70-1113/2009-011-01).

- The inspectors verified that the modifications were installed and system conditions were consistent with the design bases, and that testing assured implementation of design and safety system functionality, as applicable. The inspectors verified that design and licensing documents and operating procedures were updated to reflect the modification. Issues of minor safety significance regarding the implementation of some management measures were resolved during the inspection.

## EXECUTIVE SUMMARY (Continued)

### Emergency Preparedness (IP 88050)

- Since the last inspection conducted in August 2008, there were no major changes to the emergency preparedness program. The inspectors reviewed revisions to the emergency plan's implementing procedures and determined that the changes were appropriately authorized by management and were adequately communicated to plant personnel.
- The inspectors interviewed members of the emergency organization (e.g., emergency directors, interim emergency directors, etc), reviewed training records and determined that training was adequate to meet license commitments. The emergency directors and interim emergency directors were knowledgeable of their roles and responsibilities as part of the emergency organization. No findings of significance were identified.
- The inspectors walked down the fire brigade equipment and instrumentation, and determined that they were adequately inspected and maintained to ensure proper operations and state of readiness. There was one issue of minor safety significance regarding the documentation for a weekly fire vehicle inventory that was not available for the inspectors' review. The licensee immediately corrected the issue during the inspection.
- The inspectors visited and walked down the New Hanover County Castle Haynes Fire Department (offsite first responder) and determined that the facility and equipment were in place and maintained for response when called upon by the licensee. The inspectors noted that the fire department had a copy of the licensee's emergency plan and procedures; however, the plan and procedures were not current to reflect the updated plan and procedures kept by the licensee. Records indicated that an updated copy of the emergency plan and procedures were sent by the licensee to the Castle Haynes Fire Department. The licensee immediately updated the plan and procedures at the Castle Haynes Fire Department during the inspection. The inspectors reviewed the Mutual Aid Agreement between Castle Haynes Fire Department and the licensee and determined that the agreement was reviewed and discussed annually.
- The inspectors also visited and interviewed representatives from the Emergency Management and 911 Communicators, New Hanover County Sheriff Department, and the New Hanover County Regional Medical Center. Each representative indicated that the licensee frequently met with them and that they will provide assistance to the facility when called. Also, the representatives indicated that they were provided adequate opportunities for site-specific training and site familiarization tours. The inspector reviewed the Mutual Aid Agreements between the offsite responders and the licensee and determined that the agreement was reviewed and discussed annually by both parties.
- The inspectors reviewed and discussed drills and table top exercises conducted by the licensee since the last inspection. The inspectors determined that the results from the drill critiques adequately addressed areas for improvement including the performance of individuals in their emergency response roles. These issues were entered into the licensee's corrective action program through an unusual incident report.

### Exit Meeting Summary

- The inspection scope and results were summarized on December 17, 2009, with Mr. Sean Fuller, and members of his staff. The inspectors asked the licensee staff whether any materials examined during the inspection should be considered proprietary. Although proprietary information was discussed, no proprietary information was identified in this report.

EXECUTIVE SUMMARY (Continued)

Key Points of Contact

<u>Name</u>	<u>Title</u>
S. Fuller	GNF-A Chief Operating Officer and Facility Manager
S. Murray	Manager, Licensing & Liabilities
P. Ollis	Licensing & Liabilities Engineer
J. Reynolds	Manager, Fuels Environmental Health and Safety
J. Reeves	Manager, Integrated Safety Analysis
D. Bianco	Fire Safety & Emergency Coordinator
E. Anderson	Manager, Emergency Preparedness and Site Security GNF-A

List of Items Opened, Closed, Discussed

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
URI 2009-011-01	Opened	Re-assessment of the credibility of a 30B cylinder rupture.