



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

June 22, 2000

Global Nuclear Fuels - Americas, L.L.C.
ATTN: Mr. D. K. Dowker, Plant Manager, FMO
Global Nuclear Fuels - Americas, L.L.C.
P. O. Box 780
Wilmington, NC 28402

SUBJECT: NRC INSPECTION REPORT NO. 70-1113/2000-04 AND NOTICE OF VIOLATION

Dear Ms. Reda:

This letter refers to the inspection conducted on May 22-26, 2000, at the Global Nuclear Fuels facility. The enclosed report presents the results of this inspection.

Based on the results of this inspection, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed in this Inspection Report (70-1113/2000-04). Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be made publically available.

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

Sincerely,

/RA/

Edward J. McAlpine, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

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

Enclosures: (See Page 2)

Enclosures: 1. NRC Inspection Report
2. Notice of Violation

cc w/encls:

Charles M. Vaughan, Manager
Facility Licensing
Global Nuclear Fuels - Americas, L.L.C.
P. O. Box 780, Mail Code J26
Wilmington, NC 28402

Mel Fry, Director
Division of Radiation Protection
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SIGNATURE	/RA/	/RA/		
NAME	AGooden	DAyres		
DATE	6/14/2000	6/21/2000	6/ /2000	6/ /2000
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO

NOTICE OF VIOLATION

Global Nuclear Fuels - Americas, L.L.C.
Wilmington, North Carolina

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

During an NRC inspection conducted on May 22-26, 2000, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

License Condition 10 of Special Nuclear Materials (SNM) License No. 1097, requires the licensee to comply with all listed Safety and Safeguards Conditions.

Safety Condition S-3 states that the licensee shall maintain and execute the response measures in the Radiological Contingency and Emergency Plan (RC&EP), Revision 3, dated December 17, 1996; or as further revised by the licensee consistent with 10 CFR 70.32(i).

Section 4.2 and Table 4.3 of the RC&EP describes the onsite Emergency Response Organization (ERO). Table 7.1 of the RC&EP, entitled "Initial Training and Periodic Retraining," lists the personnel categories and the requirements for initial training and annual retraining to include a review of the basic RC&EP with any changes.

Contrary to the above, five individuals assigned to the emergency organization as primaries or alternates failed to attend annual refresher training.

This is a severity Level IV violation (Supplement VIII).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance will be achieved is already adequately addressed on the docket in this Inspection Report. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you choose to respond, your response will be made publically available. To the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such

Enclosure 1

material, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential, commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated at Atlanta, Georgia
this 22nd day of June, 2000

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-1113

License No.: SNM-1097

Report No.: 70-1113/2000-04

Licensee: Global Nuclear Fuel - Americas, L.L.C.

Facility: Fuel Manufacturing Complex

Location: Wilmington, NC 28402

Dates: May 22-26, 2000

Inspector: A. Gooden, Health Physicist

Approved By: E. McAlpine, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas NRC Inspection Report 70-1113/2000-04

This routine unannounced inspection involved observation of work activities, a review of selected records, and interviews with plant personnel involving the area of emergency preparedness. The report entails one week of inspection effort by a regional-based inspector. The inspection results disclosed the following aspects of the program:

- No decrease in program effectiveness since the last inspection due to organizational changes was observed (Paragraph 2.a).
- An independent audit of the emergency preparedness program was performed in accordance with requirements and covered many of the items in the Emergency Plan (Paragraph 2.a).
- The emergency procedures selected for review were consistent with details contained in the Emergency Plan, but lacked guidance on evacuation during inclement weather and did not include criteria to ensure that site personnel were not evacuated into a hazardous environment in transit to the staging area for accountability reporting (Paragraph 2.b).
- Lack of management oversight to emergency response training resulted in a violation for failure to train five members of the emergency organization (Paragraph 2.c).
- Staffing and activation of the emergency control center during back shifts and off-hours continued to be delayed by incorrect telephone numbers, pagers turned off, and lack of response by primary or alternate personnel (Paragraph 2.c).
- Interface with offsite officials warrants attention. Documentation was not adequate to support that proper training and site familiarization had been given or offered to local hospital and law enforcement officials (Paragraph 2.d).
- Recent drills and exercises had provided adequate training for the onsite emergency organization, but had not provided training opportunities for the offsite medical and law enforcement agencies (Paragraph 2.e).
- Accident scenarios were adequate for assessing the onsite ERO state of readiness in responding to various site postulated accidents (Paragraph 2.e).
- The emergency response equipment, instrumentation, and supplies in the emergency control center were maintained in a state of operational readiness (Paragraph 2.f).

Attachment:

Persons Contacted

Inspection Procedures

List of Items Opened, Closed, and Discussed

List of Acronyms

REPORT DETAILS

1. Summary of Plant Status

There were no unusual plant operational occurrences during the inspection. Plant operations were normal with routine maintenance activities.

2. Emergency Preparedness (88050) (F3)

a. Review of Program Changes (F3.01)

(1) Inspection Scope

Changes to the licensee's Radiological Contingency and Emergency Plan (RC&EP), procedures, organization, facilities, and equipment were reviewed to assess the impact on the effectiveness of the program. The adequacy of the emergency preparedness audit required by Section 7.5 of the RC&EP was also evaluated.

(2) Observations and Findings

The most significant organization change since the last inspection involved the individual formerly assigned the responsibility for emergency preparedness. The individual was reassigned to the dry conversion facility (DCF) during December 1999 leaving the position of Manager, Site Security and Emergency Preparedness vacant. On May 1, 2000, an individual reported as Manager, Emergency Preparedness and Training with assigned responsibilities for both security and emergency planning. The individual had previous job experience as an Emergency Director and Incident Commander.

An independent audit was conducted during June 1999, by an outside contractor. The lack of an audit checklist and/or plan resulted in a teleconference call between the inspector, licensee and auditor for the purpose of discussing areas audited. Based on the audit report and discussions with the auditor, the inspector concluded that the audit was performed in accordance with the RC&EP requirements.

(3) Conclusions

No decrease in program effectiveness since the last inspection due to organizational changes was observed. An independent audit of the emergency preparedness program was performed in accordance with requirements and covered many of the items in the RC&EP.

b. Implementing Procedures (F3.02)

(1) Inspection Scope

Selected implementing procedures were reviewed to determine if procedures were revised since the last inspection, and the adequacy of procedures in the implementation of the RC&EP.

(2) Observations and Findings

The inspector noted during the review that the emergency procedures were consistent with details contained in the Plan and appeared to adequately implement the Plan, but lacked guidance on evacuation during inclement weather and did not include criteria to ensure that site personnel were not evacuated into a hazardous environment during transit to the staging area for accountability reporting.

(3) Conclusions

The emergency procedures selected for review were consistent with details contained in the emergency plan, but lacked guidance on evacuation during inclement weather and did not include criteria to ensure that site personnel were not evacuated into a hazardous environment in transit to the staging area for accountability reporting.

c. Training and Staffing of Emergency Organization (F3.03)

(1) Inspection Scope

Emergency response training provided to key emergency response organization (ERO) personnel was reviewed to determine whether it was in accordance with Section 7.2 of the RC&EP and provided individuals with sufficient knowledge to appropriately respond to emergency conditions. The licensee's notification system was reviewed to determine whether it adequately supported prompt activation and staffing of the Emergency Control Center (ECC) during off-hours.

(2) Observations and Findings

The inspector reviewed training documentation for several individuals assigned as primary or alternate to key positions on the ERO. Based on the training attendance sheets, training status printout, and an interview with personnel responsible for tracking training, five individuals assigned to the ERO training had expired due to failure to attend annual retraining involving changes to the RC&EP and EPs. The inspector was informed that the failures resulted from the lack of management oversight to the training tracking system. The licensee contact with responsibility for emergency response training was reassigned during December 1999 and resulted in the management system tracking for overdue training not being closely monitored. On May 26, 2000, all personnel received the appropriate training. As corrective actions to prevent a recurrence, the licensee indicated that emergency response training will be tracked via the company wide web-based system utilizing a compliance developed calendar containing the training commitment, responsible individual, and status. Based on the licensee's corrective actions, the inspector concluded that the corrective actions were prompt and appeared to be adequate for preventing a recurrence. The failure to provide training to emergency response personnel in accordance with Section 7.2 and Table 7.1 of the RC&EP was a violation (VIO) of license condition S-3 (VIO 70-1113/2000-04-01).

The majority of personnel assigned to the ERO had participated in either a drill or actual event. No problems were noted during walkthroughs with two Interim Emergency Directors.

Documentation resulting from the periodic test of the administrative and physical system for staffing and activating the ERO during back shifts and off-hours disclosed that timely and positive contact of ERO personnel continue to be a problem. Based on interviews, discussions, and documentation, the inspector determined that the physical and administrative system for activating the ERO during off-hours was adequate; however, performance continued to be affected by human factors (incorrect phone number, pagers turned off, lack of response by primary or alternate, etc.).

(3) Conclusions

Lack of management oversight to emergency response training resulted in a violation for failure to train five members of the emergency organization. Staffing and activation of the emergency control center during back shifts and off-hours continued to be delayed by incorrect telephone numbers, pagers turned off, and lack of response by primary or alternate personnel.

d. Offsite Support (F3.04)

(1) Inspection Scope

Licensee activities in the areas of training, agreements, and exercises were reviewed to determine if the licensee was periodically involving offsite support groups.

(2) Observations and Findings

The inspector reviewed documentation and discussed training and site familiarization with a member of the offsite support volunteer fire department. No problems were noted. However, documentation was unavailable to show that periodic training and/or drill participation as discussed in Table 7.1 of the RC&EP was offered to hospital support personnel. Further, documentation was unavailable to validate that law enforcement personnel were periodically offered training or a site familiarization tour. When questioned by the inspector, the licensee indicated that documentation was lacking, but training was provided to hospital personnel prior to the dry conversion facility startup. Regarding law enforcement, there was no recollection that training or site familiarization tours had been offered as described in the RC&EP. The inspector discussed the requirements in Section 8.2 of the RC&EP for documenting program activities associated with training. In response, the licensee indicated that corrective actions would be taken to ensure proper documentation to validate program activities. In addition, the licensee took immediate action to offer law enforcement authorities a site orientation and familiarization tour via letter dated May 25, 2000. The corrective actions to ensure proper documentation is maintained was considered an inspector follow up item (IFI 70-1113/2000-04-02).

(3) Conclusions

Interface with offsite officials warrants attention. Documentation was not adequate to support that proper training and site familiarization had been given or offered to local hospital and law enforcement officials.

e. Drills and Exercises (F3.05)

(1) Inspection Scope

Section 7.3 of the RC&EP required a biennial exercise be performed involving the onsite ERO and many of the offsite support agencies. This area was reviewed for adequacy in testing both onsite and offsite emergency response capability, to assess the degree of challenge posed by scenarios, and verify that primary and alternates to the ERO have participated in a drill and/or exercise.

(2) Observations and Findings

The last biennial exercise was conducted on November 16, 1999, and involved participation by offsite fire support. Participation by other offsite agencies was limited to notifications only. Exercises with local law enforcement and hospital personnel was an area for improvement. Documentation to show the last hospital or law enforcement participation was not available. The next scheduled exercise to fulfill the biennial requirements in Section 7.3.1 of the Plan would be held in calendar year (CY) 2001. During the review of CY 99 training details, the inspector noted that tabletop scenarios presented to ERO personnel provided an adequate challenge to assess the effectiveness of training for participants. Individuals assigned key roles as primary or alternates to the ERO were periodically participating in drills and exercises.

Communication drills were adequate for demonstrating the mechanism for activation and notification of ERO personnel during off-hours, holidays, and weekends. Communication drills also served as the mechanism for updating the onsite and offsite emergency call list.

(3) Conclusions

Recent drills and exercises had provided adequate training for the onsite ERO, but had not provided training opportunities for the offsite medical and law enforcement agencies. Accident scenarios were adequate for assessing the ERO state of readiness in responding to various site postulated accidents.

f. Emergency Equipment and Facilities (F3.06)

(1) Inspection Scope

The Emergency Control Center (ECC) and equipment were inspected to determine whether the licensee's facilities, emergency response equipment, instrumentation, and supplies were maintained in a state of operational readiness.

(2) Observations and Findings

The inspector observed an inventory and operability check of survey instruments, dosimeters, full face respirators, and the meteorological system. Survey instruments had current calibration stickers, and selected instruments responded to a radioactive source check. The meteorological system was operational and provided the licensee with necessary data for assessing areas of impact following an airborne release of material. In addition to operability checks, documentation was reviewed which showed that periodic testing and surveillance of ECC equipment was performed at the required intervals.

(3) Conclusions

The emergency response equipment, instrumentation, and supplies in the Emergency Control Center were maintained in a state of operational readiness. Testing and surveillance was performed at the required intervals for randomly selected equipment, and the meteorological system.

g. Follow up On Previously Identified Issues (F3.07)

(1) Inspection Scope

The inspector reviewed the actions taken by the licensee to correct a previous issue to verify that the corrective actions were adequate and had been completed.

(2) Observations and Findings

The following item was reviewed, but left opened pending additional corrective actions:

(Open) IFI 70-1113/99-06-07: Verify the corrective actions to the items identified during the biennial exercise.

(3) Conclusion

The licensee had initiated corrective actions, but additional actions were necessary. This item remains open pending the completion of corrective actions.

h. Information Notice (IN)

(1) Inspection Scope

The inspector reviewed the following IN to determine if the information had been received by the licensee:

IN 2000-07: National Institute for Occupational Safety and Health Respirator User Notice: Special Precautions for Using Certain Self-Contained Breathing Apparatus Air Cylinders

(2) Observations and Findings

The inspector determined that IN 2000-07 had been received by the licensee, distributed to appropriate personnel, and reviewed for applicability. The licensee determined that existing site equipment was not affected and hence no further actions were required.

(3) Conclusion

The licensee's actions were appropriate.

3. Exit Interview

The inspection scope and results were summarized on May 26, 2000, with those persons indicated in the Attachment. Although proprietary documents and processes were occasionally reviewed during this inspection, the proprietary nature of these documents or processes has been deleted from this report. No dissenting comments were received from the licensee.

ATTACHMENT

LIST OF PERSONS CONTACTED

Licensee

- *D. Barbour, Team Leader, Radiation Protection
- D. Brown, Team Leader, Environmental Project
- C. Clemmons, Team Leader, Dry Conversion Project
- T. Davis, Team Leader, Dry Conversion Project
- T. Draffen, Manager, Dry Conversion Project
- *R. Foleck, Program Manager, Facility Licensing
- *P. Godwin, Emergency Response Coordinator and Site Fire Chief
- R. Keenan, Team Leader, Dry Conversion Project
- @#H. Knight, Manager, Emergency Preparedness and Training
- *A. Mabry, Program Manager, Radiation Safety
- @*C. Monetta, Manager, GNF-A, Environmental Health and Safety
- *R. Pace, Manager, Facilities
- #*H. Strickler, Manager, Site Environmental Health and Safety
- *D. Turner, Manager, Industrial Hygiene and Safety

Other licensee employees contacted included engineers, technicians, production staff, security, and office personnel.

Other Organizations

- D. Bianco, Chief, Castle Hayne Volunteer Fire Department
- #W. Paige, Auditor, EHS Options, Inc.

- *Attended exit meeting on May 26, 2000
- #Participated in teleconference call on May 31, 2000
- @Participated in teleconference call on June 1, 2000

INSPECTION PROCEDURES USED

IP 88050 Emergency Preparedness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
70-1113/99-06-07	Open	IFI - Verify the corrective actions to the items identified during the biennial exercise (Paragraph 2.g).

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
70-1113/2000-04-01	Closed	VIO - Failure to provide training to emergency response personnel in accordance with Section 7.2 and Table 7.1 of the RC&EP (Paragraph 2.c).
70-1113/2000-04-02	Open	IFI - Verify corrective actions taken to ensure proper documentation is maintained (Paragraph 2.d).

LIST OF ACRONYMS USED

CFR	Code of Federal Regulation
CY	Calendar Year
DCF	Dry Conversion Facility
ECC	Emergency Control Center
EP	Emergency Procedures
ERO	Emergency Response Organization
IFI	Inspector Follow up Item
IN	Information Notice
RC&EP	Radiological Contingency and Emergency Plan
SNM	Special Nuclear Material
VIO	Violation