



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

September 6, 2002

Global Nuclear Fuels - Americas, L.L.C.
ATTN: Mr. J. D. Fuller, 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. 70-1113/2002-05

Dear Mr. Fuller:

This report refers to the inspections conducted on July 29 - August 2, 2002 and August 5 - August 9, 2002 at the Wilmington facility. The purpose of the inspections were to determine whether activities authorized by the license were conducted safely and in accordance with United States Nuclear Regulatory Commission (NRC) requirements. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Based on the results of this inspection, the NRC has determined that a violation of NRC requirements occurred. This violation is being treated as a non-cited violation (NCV), consistent with Section VI.A.8 of the Enforcement Policy. This NCV is described in the subject of the inspection report. If you contest the violation or significance of this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region II, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

In accordance with 10 CFR 2.790 of NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

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

Sincerely,

/RA/

David Ayres, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

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

Enclosure: NRC Inspection Report

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-1113

License No.: SNM-1097

Report No.: 70-1113/2002-005

Licensee: Global Nuclear Fuel - Americas, LLC

Facility: General Electric

Location: Wilmington, NC 28402

Dates: July 29 - August 2, 2002
August 5 - August 9, 2002

Inspectors: M. Crespo, Fuel Facility Inspector, RII
W. Gloersen, Senior Fuel Facility Inspector, RII

Accompanying
Personnel: O. Lopez, Fuel Facility Inspector (Trainee), RII
N. Rivera, Fuel Facility Inspector (Trainee), RII

Approved By: D. Ayres, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas NRC Inspection Report 70-1113/2002-005

These routine unannounced inspections involved observation and evaluation of the licensee's programs for plant operations, low level radioactive waste storage, waste generator requirements, and transportation. The inspection identified the following aspects of the licensee's programs:

Low Level Radioactive Waste Storage

- The total population of waste containers had decreased from the previous 12 months. The incinerator was shutdown in order to replace the aging photo multiplier tubes and detectors and thus improve the performance of the box monitoring system. The non-recoverable waste and recoverable scrap containers stored on the outside storage pads were in an acceptable condition to contain the licensed material (Paragraph 2).
- There was no written approved sampling plan or procedure prior to performing the calcium fluoride waste characterization study (Paragraph 2).

Waste Generator Requirements

- The waste shipping manifests were complete and provided an acceptable level of information in the shipping papers to determine the quantities of individual radionuclides shipped. The licensee's waste shipping tracking records were complete and well organized (Paragraph 3).

Transportation

- Performance in the preparation and delivery of completed packages was acceptable. The posted safety messages reinforced a safety conscious culture at the facility (Paragraph 4.a).
- Through the review of survey records for the receipt of radioactive materials, evaluation of written procedures, and discussions with personnel responsible for performing the surveys, it was concluded that the licensee had an acceptable program for the safe receipt of radioactive materials (Paragraph 4.b).
- The operating procedures for the NRC certified packaging included the operational requirements specified in the NRC Certificate of Compliance and Safety Analysis Report (Paragraph 4.c).
- Records pertaining to shipments of radioactive materials were well maintained and easily retrievable (Paragraph 4.d).
- Audits were conducted in accordance with the requirements specified in 10 CFR 71.137. The audit findings were administrative and did not pertain to any non-conforming conditions nor safety-related issues of a shipping package (Paragraph 4.e).

- A non-cited violation was identified for a Department of Transportation package labeling error. The licensee's identification and corrective actions were acceptable to prevent recurrence. Additionally, the licensee demonstrated initiative in identifying the root causes (Paragraph 4.f).

Plant Operations

- The licensee's manager and production meetings encouraged the identification and communication of safety concerns, which in turn were communicated to the operators (Paragraph 5.a).
- The licensee's safety analyses contained sufficient detail, identified safety controls, provided for double contingency, and specified limits for controlled parameters and safety control systems (Paragraph 5.b).
- Housekeeping was adequate to not adversely affect the radiological safety or emergency egress of the facility. Plant activities were performed in accordance with approved plant procedures. Appropriate safety controls were available in an operable condition in the process area (Paragraph 5.c).
- The licensee's configuration control system for facility modifications ensured that safety significant modifications were properly reviewed, approved, and documented (Paragraph 5.d).
- The licensee's administrative controls over the operating procedures used in the facility were effective. Operators at the facility were knowledgeable of the operating procedures of their area (Paragraph 5.e).
- The licensee adequately implemented criticality alarm coverage (Paragraph 5.f).
- The licensee's actions to resolve and prevent reoccurrence of overdue functional tests were acceptable and provided new safety interlocks for the process (Paragraph 5.g).

Attachment:

Persons Contacted

Inspection Procedures

List of Items Opened, Closed, and Discussed

List of Acronyms

REPORT DETAILS

1. Summary of Plant Status

This report covered two five-day periods. Powder, pellet, and fuel assembly production proceeded at normal rates.

2. Low Level Radioactive Waste Storage (84900) (R5)

a. Inspection Scope

The licensee's storage of low-level radioactive waste (LLRW) was reviewed, including management controls, adequacy of the storage area, waste container integrity, waste reduction, and the status of the calcium fluoride relocation project.

b. Observations and Findings

The inspectors discussed the progress in reducing quantities of solid waste stored in the outside waste storage areas or "pads" with the licensee. The inspectors observed that the waste was stored outside in three types of containers: (1) five gallon canisters; (2) wooden incinerator boxes; and (3) lift liners (or "super sacks"). The five gallon canisters contained various forms of scrap (ash, recoverable scrap, and residue waste). The inspectors compared the number of waste containers on the storage pads in July 2002 to the previous year to assess performance in reducing the quantities of onsite waste storage.

Number of Cans Stored on the Outside Pads

<u>Scrap Product</u>	<u>08/08/01</u>	<u>07/30/02</u>	<u>Change</u>
Ash	5,195	2,475	- 52%
Residue	2,594	2,813	+ 8%
Recoverable	12,729	15,193	+ 19%
Total	20,518	20,481	0%

Number of Boxes Stored on the Outside Pads

<u>Wooden Box Product</u>	<u>08/06/01</u>	<u>07/30/02</u>	<u>Change</u>
Non-Combustible	1,025	852	- 17%
Combustible	919	614	- 33%
Total	1,944	1,466	- 25%

Since the last inspection of this program area, the percent of the waste stored on the outside pad has decreased. In October 2001, then licensee began to ship containers of residue and non-combustible waste to a licensed waste disposal site for burial. The licensee also began to ship the ash (generated from incinerator operations) and recoverable scrap containers to a foreign facility for uranium recovery. It should also be

noted that the licensee's incinerator had been out of service for maintenance for approximately five weeks in order to replace the incinerator box monitoring system, which included the replacement of the photo multiplier tubes and detectors. The licensee expected the incinerator to return to service by the end of August 2002.

In addition, the inspectors toured the waste storage pads. As noted in previous inspections, the pads consisted of several graveled surfaces each surrounded by a fence. Although the fences were not locked, all of the waste was located within the controlled area of the facility. The waste containers were placed directly on the graveled surface. The inspectors observed that the waste containers were in an acceptable condition to temporarily store the licensed material.

The inspectors also reviewed the licensee's characterization of the calcium fluoride (CaF_2) stored in the warehouses that was required to be performed to meet the waste acceptance criteria of the disposal site where the CaF_2 was to be shipped. The inspectors noted that the licensee had no approved sampling plan or procedure that addressed the number of samples, the sampling method, sample preparation, sample preservation, or sample chain of custody controls prior to performing the characterization study. The inspectors discussed this issue with the licensee and subsequently, a memo was written on July 31, 2002 that summarized the CaF_2 sampling that took place.

In addition, the inspectors observed the CaF_2 relocation activities for the East lagoons. At the time of this inspection, the licensee had almost completed the relocation of the CaF_2 . The licensee began to ship the lift liners containing the CaF_2 in the October 2001 to a licensed waste disposal site.

c. Conclusion

The total population of waste containers had decreased from the previous 12 months. The incinerator was shutdown in order to replace the aging photo multiplier tubes and detectors and thus improve the performance of the box monitoring system. The non-recoverable waste and recoverable scrap containers stored on the outside storage pads were in an acceptable condition to contain the licensed material. There was no written approved sampling plan or procedure prior to performing the CaF_2 characterization study.

3. Waste Generator Requirements (84850) (R6)

a. Inspection Scope

The inspectors reviewed the licensee's program for preparing waste shipping manifests as it pertained to the requirements of 10 CFR 20.1001-20.2401, Appendix G to 10 CFR Part 20, and 10 CFR Part 61.55 and 61.56.

b. Observations and Findings

From a review of selected records for solid waste disposals, the inspectors noted that the licensee had shipped noncombustible residues, soil mixture waste, debris items and CaF₂ to a licensed waste burial facility in October 2001. The inspectors verified that the licensee provided an acceptable level of information in the shipping papers to determine the quantities of individual radionuclides shipped. The inspectors discussed with the licensee the requirements of 10 CFR Part 20, Appendix G, Subsection III.A.3, which requires the conduct of a quality assurance program to assure compliance with §61.55 and §61.56, including management evaluation of the audits. In addition, the inspectors reviewed selected shipping manifests and associated paper work for calendar year 2002. The manifests were complete and met the applicable requirements of Appendix G to 10 CFR Part 20. The inspector also verified that the licensee had a procedure and program in place to track waste shipments. The inspectors reviewed the licensee's waste shipment tracking log and verified that the licensee received an acknowledgment of receipt of the waste.

c. Conclusion

The waste shipping manifests were complete and provided an acceptable level of information in the shipping papers to determine the quantities of individual radionuclides shipped. The licensee's waste shipping tracking records were complete and well organized.

4. Transportation (86740) (R4)

The inspectors reviewed the licensee's program for routine radioactive materials shipments to determine whether the licensee had established and was maintaining an effective program, to ensure radiological and nuclear safety in the packaging and delivery to a carrier of licensed radioactive materials, and to determine whether transportation activities were in compliance with the applicable NRC and the Department of Transportation (DOT) transport regulations noted below. During the inspection, transportation activities associated with fissile material shipments, including procedural guidance, quality control (QC) activities, and record completeness conducted in accordance with 10 CFR Part 71, and 49 CFR Parts 171-178 were reviewed.

10 CFR 71.5(a) requires that licensees who transport licensed material outside the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the regulations appropriate to the mode of transport of the DOT in 49 CFR Parts 170 through 189.

a. Preparation and Delivery of Completed Packages for Shipment (R4.01, R4.02)

(1) Inspection Scope

The inspectors examined the licensee's written procedures and shipment records related to the preparation and delivery of completed packages for shipment of fissile material. The inspector also observed the unirradiated fuel bundle packing operations.

(2) Observations and Findings

The inspectors verified that the licensee had acceptable procedures for the preparation of shipping packages and delivery of the packages to the carrier for shipment. The inspectors reviewed selected portions of the shipping procedures and noted that there were no significant changes to the procedures since the last inspection of this program area. For NRC certified packaging, the package preparation and loading procedures incorporated the requirements of the applicable Certificate of Compliance (CoC). The inspectors also verified that the appropriate personnel in the traffic department had current copies of the applicable DOT regulations.

The fuel bundle operators used operating procedure No. 1050.70, Fuel Bundle Packing, Revision 6, September 20, 2001. The inspectors observed fuel bundle loading operations, reviewed the procedure and noted that the operators loaded the fuel assemblies in a safe manner and in accordance with the operating procedure.

During tours of the facility, the inspector noted several safety messages posted throughout the facility pertaining to facility specific lessons learned. Specifically, the inspector noted the messages pertaining to the lifting of heavy loads and package preparation of radioactive materials. The safety messages provided color photographic images of the event, a description of the event, the causes of the event, and the actions taken to prevent the event from recurring. The posted safety messages reinforced a safety conscious culture at the facility.

(3) Conclusion

The licensee's performance in the preparation and delivery of completed packages was acceptable. The posted safety messages reinforced a safety conscious culture at the facility.

b. Receipt of Packages (R4.03)

(1) Inspection Scope

The inspectors examined the licensee's procedures and records of incoming shipments to verify compliance with the applicable requirements of 10 CFR 20.1906 relating to the pickup from a carrier, receiving, and safe opening of packages.

(2) Observations and Findings

The inspectors reviewed the records and discussed with licensee employees the program for the safe receipt and handling of uranium hexafluoride (UF₆) cylinders and incoming powder shipments. The inspectors examined selected receipt survey records for the first seven months of 2002 and noted that the correct direct and contamination surveys were performed within the time frame specified in 10 CFR 20.1906(b).

(3) Conclusion

Through the review of survey records for the receipt of radioactive materials, evaluation of written procedures, and discussions with personnel responsible for performing the surveys, it was concluded that the licensee had an acceptable program for the safe receipt of radioactive materials.

c. Shipping Procedures(R4.04)

(1) Inspection Scope

The inspectors examined the licensee's written procedures related to the preparation and delivery of completed packages for shipment of fissile material.

(2) Observations and Findings

The inspectors verified that the licensee had acceptable procedures for the preparation of shipping packages and delivery of the packages to the carrier for shipment. The inspectors noted that there were no significant changes to the procedures since the last inspection of this program area. In addition, the procedures included the required elements specified in the operations section of the Safety Analysis Report.

The inspectors noted that in the reference section of the operating procedures for the package models UX-30 overpack, new powder container, and the fuel assembly RA-2/RA-3 packages, there was no reference made to the NRC CoC or Safety Analysis Report. The inspectors noted that if the operating procedure is revised without referring and re-verifying compliance with the CoC, then there is some risk that the procedure would be in non-compliance with the CoC. The licensee acknowledged the inspector's comments.

(3) Conclusions

The operating procedures for the NRC certified packaging included the operational requirements specified in the NRC CoC and Safety Analysis Report.

d. Records of Completed Packages for Shipment (R4.06)

(1) Inspection Scope

The inspectors examined the licensee's shipment records related to the preparation and delivery of completed packages for shipment of fissile material.

(2) Observations and Findings

During the onsite inspection, licensee transportation activities regarding shipments of unirradiated fuel assemblies, uranium dioxide (UO₂) powder, and UF₆ were reviewed. Selected records covering the period January 2002 to July 2002 for those consignments were reviewed in detail. The inspector reviewed and discussed the documentation used, and subsequently maintained in the licensee's records for each radioactive

material shipment, including, the Bill of Lading, Radioactive Material Shipment Record, Vehicle Inspection Report, Receipt and Loading Verification Checklist, Packing List (Fuel Assemblies/Component Assemblies), Fuel Shipment Information Form, Container Log Sheet, and Health Physics Survey Forms. The inspector noted that the shipping records were complete and the information supplied on the shipping papers was appropriate. The inspectors noted several examples of shipping paper mistakes that were either overwritten or corrected with correction fluid instead of striking out the mistake with a line and the individual's initials. The licensee acknowledged the inspector's observations.

(3) Conclusions

The licensee's records pertaining to shipments of radioactive materials were well maintained and easily retrievable.

e. Program Audits (R4.05)

(1) Inspection Scope

The inspectors reviewed the most recent audits of the licensee's transportation activities performed since the last inspection.

(2) Observations and Findings

10 CFR 71.137 requires that the licensee carry out a comprehensive system of planned and periodic audits, to verify compliance with all aspects of the quality assurance program, and to determine the effectiveness of the program. The audits must be performed in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibilities in the areas being audited. Audited results must be documented and reviewed by management having responsibility in the area audited. Follow-up action, including re-audit of deficient areas, must be taken where indicated.

The inspectors reviewed two audits in the area of shipping and transportation that had been performed since the last inspection. The inspectors observed that the licensee did not necessarily perform a separate audit in the area of shipping and transportation, but included certain aspects of the shipping program over several audits performed during the year. Specifically, the inspector reviewed Audit Numbers 2001-03 and 2001-05. The inspectors verified that the licensee's identified audit findings were being tracked and resolved by establishing corrective action commitment dates. The inspectors noted that the audit findings in the reports noted above were administrative and did not pertain to any non-conforming conditions or safety-related issues of a shipping package. The inspectors verified that the audits were performed in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibilities in the areas being audited.

(3) Conclusions

The licensee's audits were conducted in accordance with the requirements specified in 10 CFR 71.137. The audit findings were administrative and did not pertain to any non-conforming conditions nor safety-related issues of a shipping package.

f. Review of Transportation Unusual Incidents (R4.07)

(1) Inspection Scope

The inspectors reviewed unusual incident reports (UIRs) and 30 day reports pursuant to 10 CFR 71.95 and 73.71(a)(4) as they pertained to transportation of radioactive materials events. The inspectors reviewed the events since the last inspection of this program area with licensee representatives and discussed the appropriate corrective actions that were taken.

(2) Observations and Findings

The inspector reviewed selected UIRs pertaining to the shipping and transportation program area and noted that for a shipment of five full UF₆ cylinders to Framatone-ANP in Richland, Washington on June 14, 2002, the licensee was notified by Framatone-ANP that Radioactive Yellow-II hazardous materials labels were affixed to the shipping containers instead of the required Radioactive Yellow III labels. After the licensee was notified by Framatone-ANP, the licensee initiated an investigation. The licensee also identified that an additional shipment of five UF₆ heel cylinders was shipped to USEC-Paducah, Kentucky with incorrect hazardous materials labels. The licensee's investigation included a root cause determination, immediate actions taken, and additional corrective and preventative actions taken.

The licensee identified the root causes to be as follows: (1) The individual preparing the shipment did not check that the correct radioactive material label stock was loaded into the label printer; and (2) the labels were not verified as correct following printing or when being applied to the packages. The corrective and preventative actions included:

(1) Review the pending UF₆ cylinder shipments to assure documentation, labels, and markings were accurate; (2) establish an over-check of documentation, including labels, by a shipping staff member who is certified in hazardous material transportation and not involved in the preparation of the shipping paper work and perform the over check prior to shipping; (3) procure dedicated hazardous label printers for each type of hazard label so that the label stock does not have to be changed each time a shipment is prepared; (4) review the event with shipping personnel in a lessons learned training session; (5) digitize the packing process to provide an electronic link that assures correlation between the UF₆ cylinder and the over pack in which it is packed is correct.

This non-repetitive and corrected violation is being treated as a non-cited violation (NCV), consistent with Section VI.A.8 of the NRC Enforcement Policy (NCV: 70-1113/2002-05-01: Violation of Department of Transportation package labeling requirements).

(3) Conclusions

The licensee demonstrated initiative in identifying the root causes. The licensee's identification and correction of the DOT package labeling violation was acceptable to prevent recurrence.

5. Plant Operations (IP 88020) (O3)

a. Management and Administrative Practices (O3.01)

(1) Inspection Scope

The inspector interviewed supervisors of the fuel production area to verify that safety problems were identified, reported, and resolved in a timely manner. The inspector also observed a Morning Production meeting and several Morning Manager's meetings.

(2) Observations and Findings

The inspector noted that each of the meetings began with the discussion of safety issues. Since these meetings occur daily, management was kept up-to-date of the status of all safety concerns in the facility. The inspector noted that during the management meetings, issues observed the day prior in the process area were thoroughly discussed. The safety issues communicated to upper management illustrated clear safety communication between operators and managers. Upon reaching a conclusion on a contamination issue, management had posted detailed illustrations regarding the issue throughout the facility. These actions demonstrated to the inspector that the licensee communicated safety issues to the employees of the facility in a timely manner.

(3) Conclusions

The licensee's manager and production meetings encouraged the identification and communication of safety concerns, which in turn were passed down to the operators.

b. Safety Function (O3.02)

(1) Inspection Scope

The inspector reviewed criticality evaluations for selected process areas to verify that they identified safety controls, provided for double contingency, and specified limits for controlled parameters and safety control systems.

(2) Observations and Findings

The inspector reviewed the criticality evaluations for the homogenizer and the blender in the Dry Conversion Process (DCP). The inspector concluded that the criticality evaluations adequately addressed double contingency and specified parameters for use in the process. The inspector also reviewed the criticality analysis for the modification of

the pellet cabinets. The analysis, which was in the final stages of review, was conservative and appeared to provide an adequate safety margin.

The inspector noted that the licensee had implemented a control program that would maintain the ability to access the Nuclear Safety Release/Requirements (NSRR) computer program, which was used to identify safety controls. A controlled tag had been placed on all the computers equipped with the NSRR program, which indicated that the machine should have the program available. A routine audit of these tagged computers ensured that the software upgrades do not eliminate access to this program.

(3) Conclusions

The licensee's safety analysis for the homogenizer and blender contained sufficient detail, identified safety controls, provided for double contingency, and specified limits for controlled parameters and safety control systems.

c. Plant Activities (O3.03)

(1) Inspection Scope

The inspector reviewed plant housekeeping to verify that it did not adversely affect the radiological safety or emergency egress of the facility. Plant activities were reviewed to determine if they were performed according to approved plant procedures. The inspector also reviewed several safety controls to verify that they were available in an operable condition in the process area.

(2) Observations and Findings

The inspector toured the facility and noted no issues where the housekeeping could affect the radiological safety or emergency egress of the facility.

During the inspection, an event occurred at the facility in which the DCP reactor screw failed to restart. The failed condition of the reactor screw went unnoticed by the operators until the system became over pressurized and automatically shutdown. Sampling determined that the powder still in the system was within moisture limits. The powder was then dispositioned appropriately. The line was brought back on-line after the replacement of the screw rotator detector. The licensee was thoroughly reviewing the event and possible integrated safety analysis changes. The inspector interviewed the process engineer for the reactor/kiln system of DCP and determined that he was knowledgeable of the safety controls. These controls included criticality controls such as the safe shutoff valves and temperature and pressure monitors.

(3) Conclusions

Housekeeping was adequate to not adversely affect the radiological safety or emergency egress of the facility. Plant activities were performed in accordance with approved plant procedures. Appropriate safety controls were available in an operable condition in the process area.

d. Configuration Controls (O3.04), Change Control (O3.05)

(1) Inspection Scope

The inspector reviewed the licensee's configuration control system for recent facility modifications to verify that safety significant modifications were reviewed, approved, and documented according to their procedures.

(2) Observations and Findings

The inspector reviewed a change request concerning the modification of the pellet cabinets. The change request was proceeding through the appropriate approvals. The inspector also reviewed the controls for the nitrate break tanks that were periodically used for acid transfers. The inspector noted no issues with the controls of the break tanks.

During the tour of the facility, the inspector noted an inconsistency in the licensee's positioning of trash receptacles in controlled areas. The inspector noticed that the receptacles located in the incinerator room were spaced differently from those located in the DCP area. When this issue was brought to the attention of the licensee, the licensee stated that the situation for two trash receptacles being next to each (which was found throughout the facility) had not been evaluated. Only the single receptacles were analyzed in the safety review. The licensee was still analyzing the situation by the end of the inspection period, therefore this issue will be tracked as Unresolved Inspection Item (URI) 2002-05-02.

(3) Conclusions

The licensee's configuration control system for facility modifications ensured that safety significant modifications were properly reviewed, approved, and documented.

e. Operating Procedures (O3.06)

(1) Inspection Scope

The inspector observed operations being performed throughout the facility to verify that the appropriate operating procedures were being followed. The inspector also verified that any changes in procedures involved the appropriate approvals.

(2) Observations and Findings

The inspector observed the DCP control room operators addressing a process upset. The operators were noted to be properly referring to their procedures to determine how to address the issue.

The inspector reviewed how moisture samples from cooling hoppers were analyzed by the lab. The inspector noted that the lab technicians were adequately following their procedures.

The inspector reviewed the compensatory instructions for the criticality alarm system used during severe weather. The compensatory instructions detailed how a trained individual would be assigned to the criticality alarm station and would assess the readings of the detectors prior to initializing the criticality evacuation alarm. This procedure minimized the threat of false alarms that could place plant personnel in danger if they evacuate into severe weather. The inspector verified that the procedure contained the appropriate approvals for use.

(3) Conclusions

The licensee's administrative controls over the operating procedures used in the facility were effective. Operators at the facility were noted to be knowledgeable of the operating procedures of their area.

f. Criticality Alarm Systems (O3.10)

(1) Inspection Scope

The inspector reviewed the criticality alarm system with the licensee and observed the locations for several of the criticality alarm detectors and the dual detector site coverage.

(2) Observations and Findings

The inspector verified the licensee's system of dual detector coverage for several areas of the facility through the use of a layout map. The inspector also verified the locations of several of the detectors throughout the facility. The inspector also verified the source of backup power for the detectors.

(3) Conclusions

The licensee adequately implemented criticality alarm coverage.

g. Review of Previous Events (O3.12)

(1) Inspection Scope

The inspector reviewed the licensee's follow-up actions to the discovery of overdue functional tests for equipment in the dry scrap recycle area, which occurred in March 2002.

(2) Observations and Findings

In an effort to prevent overdue functional tests from occurring, the licensee's management had decided to upgrade the facility's material control and accounting system, the Fuel Business System (FBS). The upgrade was designed to track all the functional tests for the facility and will lockout work stations (preventing new material from entering the area) if a test in the area was overdue. Following the discovery of

several overdue functional tests in March, the licensee's management accelerated work on the upgrade for the FBS and, by April 2002, the upgrade was in place.

(3) Conclusions

The licensee actions to resolve and prevent reoccurrence of overdue functional tests were acceptable and provided new safety interlocks for the process.

6. Exit Meeting

The inspections' results were summarized on August 2, 2002 and August 9, 2002, with those persons indicated in the Attachment. Although proprietary documents and processes were 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

1. PARTIAL LIST OF PERSONS CONTACTED

Licensee

- *# M. Allen, Manger, Industrial Hygiene & Safety
- # D. Barbour, Radiation Protection team Leader
- * R. Brown, Manager, Fuel Design and Fabrication
- * S. Coleman, Senior Engineer, Nuclear Safety/Material Control and Accounting
- *# R. Crate, Manager, Powder Production & Support Services
- *# D. Dowker, Manager, Global Supply Chain
- *# R. Foleck, Program Manager, Facility Licensing
- # D. Holden, Sr. Specialist, Licensing and Traffic, SJ
- *# R. Lillge, Manager, Logistics
- # A. Mabry, Program Manager, Radiological Engineering
- # P. Marthur Environment, Health and Safety Specialist
- * R. Martyn, Manger, Material Control and Accounting
- # C. Monetta, Manager, Environmental, Health and Safety
- *# S. Murray, Outage Services Environmental, Health and Safety
- # R. Pace, Manager Environmental Projects
- * L. Paulson, Manager, Nuclear Safety
- # D. Pensinger, QA Audits Manager, GENE
- * J. Reeves, for R. Roessler, Manager, Facilities and Maintenance
- * J. Reynolds, Technical Leader, Shop Support and URLS/WT Team
- * R. Haughton, for D. Tashjian, Manager, Fuel Fabrication
- * E. Saito, Environmental, Health and Safety Blackbelt
- # A. Scott, GNF-A Lead Auditor
- # L. Shimizu, OMLP (Shipping Traffic)
- *# S. Smith, Radiation Safety Monitor
- # H. Strickler, Manager, Site Environment, Health and Safety
- # D. Tashjian, Manager, Fabrication Product Line
- * J. Taylor, Criticality Safety
- # C. Vaughan, Manager, Facility Licensing
- # V. Yopp, Leader, Shipping/ Refurbishing, Shipping and Traffic

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

Attended exit meeting on August 2, 2002

* Attended exit meeting on August 9, 2002

2. INSPECTION PROCEDURES (IP) USED

IP 84850	Radioactive Waste Management (10 CFR Parts 20 and 61)
IP 84900	Low-Level Radioactive Waste Storage
IP 86740	Inspection of Transportation Activities
IP 88020	Regional Nuclear Criticality Safety Inspection Program

3. **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

<u>Item</u>	<u>Status</u>	<u>Description</u>
70-1113/2002-05-01	Open/Closed	NCV: Violation of Department of Transportation package labeling requirements (Paragraph 4.f)
70-1113/2002-05-02	Open	URI: Unanalyzed array of trash receptacles (Paragraph 5.d)

4. **LIST OF ACRONYMS USED**

CaF ₂	Calcium Fluoride
DCP	Dry Conversion Process
DOT	Department of Transportation
FBS	Fuel Business System
GNF-A	Global Nuclear Fuels-Americas
IP	Inspection Procedure
IR	Inspection Report
CoC	Certificate of Compliance
LLRW	Low-Level Radioactive Waste
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NSRR	Nuclear Safety Release/Requirements
QC	Quality Control
UIR	Unusual Incident Report
UO ₂	Uranium Dioxide
UF ₆	Uranium Hexafluoride