



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

October 26, 2000

EA-00-246

Global Nuclear Fuel - Americas, L.L.C.
ATTN: Mr. D. Dowker, Manager
GNF-A Fuel Manufacturing
P. O. Box 780
Wilmington, NC 28402

SUBJECT: NRC INSPECTION REPORT NO. 70-1113/00-07

Dear Mr. Dowker:

This refers to the inspection conducted on September 25 - 29, 2000, at the Global Nuclear Fuel Wilmington, North Carolina facility. The enclosed report presents the results of this inspection. Telephonic discussions about the results of the inspection occurred with your staff on October 20 and 25, 2000.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, one apparent violation was identified and is being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions - May 1, 2000" (Enforcement Policy), NUREG-1600. The current Enforcement Policy is included on the NRC's website at www.nrc.gov/OE. The apparent violation involves the failure to control of licensed material in the form of eight calibration sources containing plutonium as discussed in Section 2.b of the attached report. The circumstances surrounding the apparent violation, the significance of the issues, and the corrective actions being taken were discussed with members of your staff during the inspection on September 26, 2000, and telephonically on October 25, 2000. As a result, it may not be necessary to conduct a predecisional enforcement conference in order to enable the NRC to make an enforcement decision.

In addition, since you identified the violation and your facility has not been the subject of escalated enforcement actions within the last two years, and based on our understanding of your corrective actions, a civil penalty may not be warranted in accordance with Section VI.C.2 of the Enforcement Policy. The final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either (1) respond to the apparent violation addressed in this inspection report within 30 days of the

date of this letter or (2) request a predecisional enforcement conference. If a conference is held,

it will be open for public observation. The NRC will also issue a press release to announce the conference. Please contact E. McAlpine at (404) 562-4711 within seven days of the date of this letter to notify the NRC of your intended response.

Your response should be clearly marked as a "Response to An Apparent Violation in Inspection Report No. 70-1113/00-07" and should include for each apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. In presenting your corrective action, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. The guidance in the enclosed NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION," may be helpful. Your response should be submitted under oath or affirmation and may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision.

In addition, please be advised that the characterization of the apparent violation described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, Enclosure 1, and your response (if you choose to provide one) will be made available electronically for public inspection in the NRC 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Douglas M. Collins, Director
Division of Nuclear Materials Safety

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

Enclosures: (See Page 3)

Enclosures: 1. NRC Inspection Report
2. NRC Information Notice 96-28

cc w/encl 1:

Charles M. Vaughan, Manager
Facility Licensing
Global Nuclear Fuels - Americas, L.L.C.
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 70-1113

License No: SNM-1097

Report No: 70-1113/2000-07

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

Location: Wilmington, NC 28402

Inspection Dates: September 25-29, 2000

Inspectors: D. Ayres, Senior Fuel Facilities Inspector
R. Swatzell, Fuel Facilities Inspector

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

Approved By: D. M. Collins, Director
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Global Nuclear Fuel - Americas NRC Inspection Report 70-1113/2000-07

The focus of this routine, unannounced inspection was the observation and evaluation of the licensee's programs for operational safety, management controls, environmental protection and waste management. The inspection also included evaluations of the licensee's responses to previously identified issues and incidents. The report includes inspection efforts of two regional inspectors. The inspectors were accompanied by the Chief, Fuel Facilities Branch, NRC Region II during portions of two days during the inspection. The inspection identified the following aspects of the licensee programs as outlined below:

Plant Operations

- Operating procedures for the solvent extraction concentrators adequately described process hazards and safety controls. Critical valves were not always clearly labeled in the production area. The Integrated Safety Analysis (ISA) for the Uranium Recovery Unit (URU) lacked consideration of potential chemical hazards identified in operating procedures. (Section 2.a)
- The licensee's investigation of the loss of two sets of calibration sources containing plutonium was thorough, but did not determine the location of the material. The failure to control and maintain constant surveillance of licensed material not in storage was identified as an apparent violation, Escalated Enforcement Item (EEI) 70-1113/00-07-01. (Section 2.b)

Management Organization and Controls

- The organization met the structure and qualification requirements specified in the license. Individuals were aware of their responsibilities with respect to nuclear criticality and radiological safety. (Section 3.a)
- The licensee's procedure controls adequately ensured that procedures were reviewed by appropriate safety management and that only the currently approved versions were available to workers. (Section 3.b)

Environmental Protection

- The licensee implemented the environmental monitoring program in accordance with License SNM-1097 requirements. No new additional environmental contamination problems were noted and representative samples of environmental media were being obtained. (Section 4.a)
- Evaluation of need for additional groundwater monitoring for technetium-99 migration around the waste water treatment facility (WWTF) was ongoing (Section 4.a)

- The licensee had completed decommissioning operations at the Northwest Storage Area and the area had been backfilled and the security fencing removed. Calcium fluoride removal from the fluoride waste lagoons was anticipated to continue until the end of 2000. (Section 4.b)
- Additional analyses were needed to determine the quantity of technetium-99 in the residual calcium fluoride (CaF_2) removed from the fluoride lagoons. (Section 4.b)
- The licensee had an appropriate method for determining the uranium content of CaF_2 . (Section 4.b)

Waste Management

- The licensee adequately met the monitoring and release concentration limits of license SNM-1097 and 10 CFR Part 20 for liquid effluents. (Section 5.a)
- Gross beta activity levels had increased in liquid effluents due to technetium-99 from the calcium fluoride relocation project. However, the increased beta activity concentrations were well below 10 CFR Part 20 release criteria for technetium-99. (Section 5.a).
- The calculated offsite dose due to airborne releases was significantly below the as low as reasonably achievable (ALARA) constraint criteria of 10 millirem/year (mrem/yr). (Section 5.b)
- Inoperable heat tracing caused condensate formation in two gaseous effluent sample lines, resulting in reduced sample air flow. Otherwise, the licensee's program for monitoring radioactive constituents in plant airborne effluents was adequately implemented. (Section 5.b)
- The licensee was implementing an acceptable program for non-destructive assay of combustible, non-combustible, and organic waste material. (Section 5.c)

REPORT DETAILS

1. Summary of Plant Status

This report covered the efforts of two regional inspectors during a one-week period. Pellet production, rod loading, bundle assembly, and uranium recovery continued operations at near normal levels. There were no unusual plant operational occurrences reported during the onsite inspection.

2. Plant Operations (O3) (IP 88020)

a. Conduct of Operations (O3.01)

(1) Inspection Scope

Operations in the uranium recovery areas were reviewed to verify adherence to safety requirements and that safety controls identified in operating procedures were available to perform their intended function.

(2) Observations and Findings

The inspector observed operations in the Uranium Recovery Unit (URU) area and conducted interviews with operators and engineering staff. The inspector reviewed operating procedures for the two uranium solution concentrators. The inspector observed that the procedures adequately described the safety features of the concentrators, but that process sketches did not consistently show the critical process valves. During tours of the facility, the inspector also observed that the two critical valves identified in the procedure for the solvent extraction (Sx) feed concentrator were not adequately labeled to identify them as critical valves. The licensee immediately installed new labels for these valves. The inspector observed critical valves in other areas of Sx and found them to be properly labeled.

The inspector reviewed the Integrated Safety Analysis (ISA) for the URU area and focused on the Sx feed concentrator. The inspector found that criticality safety issues were properly addressed, but that two chemical hazards identified in the operating procedures were not part of the analysis. The hazards associated with the potential presence of two explosive compounds (ammonium nitrate and red oil) were explained in the operating procedures and controls protecting against the hazards were identified. The licensee indicated that the formation of "red oil" or the presence of ammonium nitrate in significant quantities was unlikely due to process controls and limitations. However, the inspector pointed out that the recently revised 10 CFR Part 70 required (once fully implemented) that the ISA address all potential hazards and describe the protections to prevent their occurrence. The licensee stated that they would revisit the ISA and the operating procedures to ensure that potential hazards were addressed in the ISA and that warnings against hazards that were not credible be removed from operating procedures.

(3) Conclusions

Operating procedures for the solvent extraction concentrators adequately described process hazards and safety controls. Critical valves were not always clearly labeled in the production area. The ISA for the URU lacked consideration of potential chemical hazards identified in operating procedures.

b. Review of Previous Events (O3.07)

(1) Inspection Scope

The licensee's response to previous events were reviewed to determine if adequate measures had been taken to prevent recurrence.

(2) Observations and Findings

The inspector reviewed event No. 37279 (Nuclear Material Events Database (NMED) No. 000652) concerning the loss of two sets of calibration sources. Each source set contained four metal disks electroplated with plutonium-239. The sources were in an insoluble form with an amount of radioactivity low enough that there was no detectable dose at the external surface of the package, and that external radioactivity labels were not required on the package.

The licensee's investigation revealed that the sources were shown to have been delivered to the site as evidenced by the receiver's signature on delivery documents. The package containing the sources was shown to have been delivered along with about twenty other packages. The receiver counted the number of packages and verified that the proper number was being delivered as shown on the invoice. However, no effort was made to ensure that the packages received were the correct ones. Since the package containing the sources did not have exterior labels indicating it contained radioactive materials, it would not be obvious that the sources were not included in the shipment. The licensee conducted an extensive site-wide search for the missing sources and offered a reward for their recovery. The licensee contacted the delivery company who also performed a search for the package. Despite these efforts, the sources were not found.

The licensee identified that the process of clearly identifying incoming packages of radioactive materials failed. This resulted in the loss of control over reportable quantities of licensed nuclear material. The licensee subsequently revised its procedures involving receipt of radioactive materials via common carrier such that each package received was to be verified as being consistent with the shipping papers. The procedures were also revised to immediately disposition received licensed material to an approved storage location. The failure to control and maintain constant surveillance of licensed material that was not in storage was an apparent violation of 10 CFR Part 20 requirements and was identified as an apparent violation, Escalated Enforcement Item (EEI) 70-1113/00-07-01.

(3) Conclusions

The licensee's investigation of the loss of two sets of calibration sources containing plutonium was thorough, but did not determine the location of the material. The failure to control and maintain constant surveillance of licensed material not in storage was identified as an apparent violation, EEI 70-1113/00-07-01.

3. Management Organization and Controls (O5) (IP 88005)

a. Organizational Structure (O5.01)

(1) Inspection Scope

The licensee's organizational structure was reviewed to determine whether it met the license requirements for structure and personnel qualifications, and to determine if key individuals were aware of their responsibilities with respect to nuclear criticality and radiological safety.

(2) Observations and Findings

The inspectors reviewed the licensee's organizational structure due to recent management changes. The inspectors reviewed the resumes of several individuals in management positions and determined that the licensee's organization met the requirements specified in the license application. Discussions with selected individuals indicated that the personnel were aware of their responsibilities with respect to nuclear criticality and radiological safety.

(3) Conclusions

The organization met the structure and qualification requirements specified in the license. Individuals were aware of their responsibilities with respect to nuclear criticality and radiological safety.

b. Procedure Controls (O5.02)

(1) Inspection Scope

The licensee's system for revising, reviewing, approving, issuing and controlling procedures was reviewed to verify that adequate and accurate information was being conveyed to workers to enable them to perform tasks safely.

(2) Observations and Findings

The inspector reviewed several operating procedures and documents for higher level general plant practices. The inspector found several minor inaccuracies in both types of documents, indicating the need for closer scrutiny in the review process. The inspector observed the copies of procedures available to workers in the URU area and found that

all had been reviewed and approved by proper safety management and were the correct current versions. The inspector also found that all of these procedures had been reviewed within the past three years in accordance with license requirements.

(3) Conclusions

The licensee's procedure controls adequately ensured that procedures were reviewed by appropriate safety management and that only the currently approved versions were available to workers.

4. Environmental Protection (R2) (IP 88045)

a. Monitoring Program Implementation (R2.01)
Monitoring Program Results (R2.02)
Management Audits, Inspections and Controls (R2.03)

(1) Inspection Scope

The inspector reviewed the licensee's Environmental Protection Program to verify that program implementation and sample results were consistent with license requirements and to verify that plant operations had not significantly increased radioactivity levels in environmental media. In addition, the inspector reviewed the licensee's environmental program audit program results and also observed the acquisition of surface and ground water samples and environmental ambient air samples.

(2) Observations and Findings

The inspector reviewed selected results from soil, vegetation, surface water, and environmental air samples and observed that environmental gross alpha, gross beta, and uranium values consistently remained below licensee action levels for the majority of environmental media samples. It was observed that several environmental samples for radioactivity and uranium levels had exceeded licensee action levels for which the licensee had issued Environmental Action Level (EAL) investigation statements. The EALs had recommended appropriate corrective actions (i.e. re-sampling, trending, etc.). Historically contaminated groundwater at site sampling locations were appropriately noted where licensee action levels were consistently exceeded. Contamination levels at these locations remained consistent with previous reporting periods and no further migration of the contamination was observed. No new areas of contaminated groundwater were identified. The inspector noted the technetium-99 contamination identified in process effluents (see section 5.a.2) and specifically reviewed groundwater monitoring data for wells down gradient from the process waste water treatment facility (WWTF). The inspector did not observe any elevated gross beta activity trends. The licensee indicated that the potential for technetium-99 migration would be evaluated and the need for additional groundwater monitoring for technetium-99 contamination would be determined.

The inspector also observed the acquisition of environmental media (surface water, groundwater, and ambient air samples). The inspector noted that sampling equipment was well maintained and properly calibrated, and sampling protocol was adequate to ensure that representative samples were acquired. The inspector also reviewed the licensee's most recent biennial audit (conducted in 1999) of the contractor performing environmental analyses. This audit had traditionally been performed by licensee personnel from the Material Control and Accounting (MC&A) section due since the contractor had also performed applicable MC&A analyses (uranium isotopic, etc.). The inspector noted that although the audit met license requirements, the audit was weak in that it did not identify any specific findings related to the contractor's ability to perform the required analyses. In addition, the inspector was informed that MC&A personnel will not have audit responsibilities in the future. Instead, the licensee will be assigning other members of the Environmental Health and Safety staff to perform quality control audits and will include inspection of quality control on specific environmental analyses such as gross alpha and gross beta .

(3) Conclusions

The licensee had implemented the environmental monitoring program in accordance with license requirements. No new additional environmental contamination problems were noted and representative samples of environmental media were being obtained. The licensee was evaluating the need for additional groundwater monitoring for technetium-99 migration around the WWTF). Future contractor audits will include inspection of specific in-house quality control mechanisms for environmental analyses such as gross alpha and gross beta.

b. Decommissioning Activities (R2.07)

(1) Inspection Scope

The inspector reviewed the status of the licensee's current decommissioning and remediation actions to verify adherence to 10 CFR 70.38. Specifically, the inspectors reviewed decommissioning progress at the Northwest Calcium Fluoride (CaF₂) Storage Area and the removal of CaF₂ material from the fluoride lagoons at the waste treatment facility. The inspectors also reviewed the licensee's method for determining the uranium content of the removed CaF₂ material.

(2) Observations and Findings

The inspector observed that decommissioning actions at the Northwest Storage Area involving the removal and relocation of CaF₂ material to the warehouses had been completed. Final surveys of the site had been accomplished and the site had been completely backfilled and the security fencing removed. In addition, the inspectors observed that the licensee had, to date, relocated approximately 93 percent of the CaF₂ material from the waste treatment facility fluoride lagoons to storage warehouses. The licensee anticipated that this activity would be completed during the last quarter of 2000. The licensee had been pursuing disposal options for the CaF₂ removed from the

lagoons, but had not decided final disposition of this material. Due to the levels of technetium-99 in the final process effluents from the de-watering of the fluoride lagoon CaF₂ material, the licensee was to perform analyses to determine the technetium-99 content of the relocated CaF₂ material.

The inspector observed the gamma spectroscopy system used for determining the uranium content of the removed CaF₂ material. The system was calibrated with a standard designed to simulate CaF₂ containers. The inspector noted that the density of the standard (1.0 gram per cubic centimeter (g/cc)) was somewhat different than the actual samples analyzed (approximately 1.5 g/cc). However, the licensee had compensated by assuming a conservative per cent solids factor (i.e. no sample drying) which was used to adjust the activity concentration per unit weight dry material. The licensee compared total uranium concentration (ppm) as determined by the on-site kinetic phosphorescence method with the gamma spectroscopy system. This comparison showed very good agreement (slightly conservative) between the uranium values as determined by the two methods.

(3) Conclusions

The licensee had completed decommissioning operations at the Northwest Storage Area and the area had been backfilled and the security fencing removed. Calcium fluoride removal from the fluoride waste lagoons was anticipated to continue until the end of 2000. Additional analyses were needed to determine the quantity of technetium-99 in the residual CaF₂ removed from the fluoride lagoons. The licensee had an appropriate method for determining the uranium content of CaF₂.

5. Waste Management (R3) (IP 84850, 84900, and 88035)

a. Liquid Effluent Monitoring Results (R3.02)

(1) Inspection Scope

The inspector reviewed the licensee's results for semiannual liquid effluent monitoring for the second half of 1999 and the first half of 2000 to determine if License SNM-1097 conditions for plant liquid effluents had been satisfied and to determine if liquid effluent releases met 10 CFR Part 20 requirements.

(2) Observations and Findings

Table 1 shows the comparison of radioactive liquid effluent releases during the second half of 1999 and the first half of 2000.

Table 1: Liquid Effluent Summary (microcuries)

Radioactive Elements	Second half of 1999	First half of 2000
Uranium-234	16,100	34,300
Uranium-235	629	1300
Uranium-236	3	93
Uranium-238	2350	4,500
Total	19,082	40,193

The data shows that the total quantity of uranium isotopic radioactivity discharged in liquid effluents from the second half of 1999 to the first half of 2000 had approximately doubled. The inspector noted that the levels experienced during the first half of 2000 were similar to other operating periods (i.e. first half of 1999). The average radioactivity concentration of liquid effluents due to uranium isotopes was approximately 139 picocuries per liter (pCi/L), which was within 10 CFR Part 20 release criteria (300 pCi/L) for uranium isotopes. In addition, the inspector observed that no single weekly sample exhibited an activity (gross alpha) concentration exceeding 150 pCi/L. However, the inspector noted that the licensee had experienced high beta activity in process liquid effluents (300-600 pCi/L). The licensee had performed an investigation and determined that the increased beta levels were due to technetium-99 (14,000 pCi/L) in waste water inputs from activities (de-watering / filtration) at the calcium fluoride relocation project. The inspector noted that the increased beta activity concentrations (300-600 pCi/L) were well below 10 CFR Part 20 release criteria for technetium-99 (60,000 pCi/L).

(3) Conclusions

The licensee adequately met the monitoring and concentration requirements of license SNM-1097 and 10 CFR Part 20 for liquid effluents. Gross beta activity levels had increased in liquid effluents due to technetium-99 from the calcium fluoride relocation project. However, the increased beta activity concentrations were well below 10 CFR Part 20 release criteria for technetium-99.

b. Airborne Effluent Program Controls, Procedures, and Instrumentation (R3.03)
Airborne Effluent Monitoring Results (R3.04)

(1) Inspection Scope

The inspector reviewed the licensee's airborne effluent monitoring program to verify that it adequately met 10 CFR Part 20 and license requirements. The inspector also inspected selected effluent sampling stations to ensure that representative samples were being obtained.

(2) Observations and Findings

Table 2 shows the comparison of radioactive airborne effluent releases during the last half of 1999 and the first half of 2000.

Table 2: Gaseous Effluent Summary (microcuries)

Radioactive Elements	Second half of 1999	First half of 2000
Uranium-234	8.70	13.40
Uranium-235	0.34	0.51
Uranium-236	0.01	0.04
Uranium-238	1.27	1.76
Total	10.32	15.71

The data shows an increase in radioactivity levels (approximately 52 percent) in airborne effluents between the second half of 1999 and the first half of 2000. Calculated offsite doses were well below the as low as reasonably achievable (ALARA) criteria of 10 mrem/yr specified in 10 CFR 20.1101(d). In addition, the inspector observed the acquisition of particulate samples from selected release stacks (Fuel Manufacturing Operations (FMO), Incinerator Building, Calcium Fluoride Building, Hydrofluoric Acid Recovery, etc.). The inspector noted that the samples were properly acquired and the appropriate information was recorded. The inspector noted that the sampling lines for the Calcium Fluoride and Incinerator Buildings contained condensate as a result of malfunctioning heat tracing, which had caused air flow stoppage. The licensee acknowledged that this could result in non-conservative stack effluent results and the licensee promptly corrected the situation by performing maintenance to ensure that sample line heat tracing was operating properly.

(3) Conclusions

The calculated offsite dose due to airborne releases was significantly below the ALARA constraint criteria of 10 mrem/yr. Inoperable heat tracing caused condensate formation in two gaseous effluent sample lines, resulting in reduced sample air flow. Otherwise, the licensee's program for monitoring radioactive constituents in plant airborne effluents was adequately implemented.

c. Waste Classification (R3.06)(1) Inspection Scope

The non-destructive assay system used for determining the uranium (uranium-235, etc.) content of combustible and non-combustible boxed waste and drummed organic waste was reviewed to verify proper operation to adequately characterize radioactive waste.

(2) Observations and Findings

The inspector toured the licensee's non-destructive assay (NDA) system for determining the uranium content of boxed waste (combustible and non-combustible) and drummed organic waste. This NDA system consists of a shielded sodium iodide detector interfaced with gamma spectroscopy analysis equipment (software and hardware). The 1.1 Mev gamma peak from protactinium-234 in secular equilibrium with uranium-238 was measured and uranium-235 was then calculated based on current plant processing enrichments. Transmission compensations, based on waste density variations, were made by taking measurements of the unknown geometry (box or drum) and a standard source of known activity. The inspector reviewed licensee calibration records for the box geometry and then observed an iteration of system setup involving a background count and comparison of a box standard count for comparison against current quality control data. The inspector noted that the results of the system check fell within acceptable statistical limits ensuring that the system was performing properly prior to assay of unknown waste materials.

(3) Conclusions

The licensee was implementing an acceptable program for non-destructive assay of combustible, non-combustible, and organic waste material.

6. Exit Meeting

The inspection scope and results were summarized on September 29, 2000, with those persons indicated in the Attachment. On October 20 and 25, 2000, telephonic discussions were held with the licensee regarding the apparent violation discussed in Section 2.b of the report details. Although proprietary documents and processes were reviewed during this inspection, the proprietary nature of these documents or processes was not included in this report.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

- R. Bragg, Manager, Chemical Product Line
- *D. Brown, Team Leader, Environmental Projects
- *T. Crawford, Sr. Environmental Engineer
- *D. Dowker, Plant Manager, Fuel Manufacturing Operations
- *%R. Foleck, Program Manager, Facility Licensing
- *%C. Monetta, Manager, GNF-A Environment, Health and Safety (EHS)
- *L. Paulson, Manager, Nuclear Safety
- * J. Reynolds, Chemical Product Line Engineer
- *H. Strickler, Manager, Site EHS
- *#%C. Vaughan, Manager, Site Licensing

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

- * Attended exit meeting on September 29, 2000.
- # Participated in telephone conversation on October 20, 2000.
- %Participated in telephone conversation on October 25, 2000.

INSPECTION PROCEDURES USED

IP 84850	Radioactive Waste Management - Inspection of Waste Generator Requirements of 10 CFR 20 and 10 CFR 61
IP 88005	Management Organization and Controls
IP 88020	Regional Nuclear Criticality Safety Inspection Program
IP 88035	Radioactive Waste Management
IP 88045	Environmental Protection
IP 88104	Decontamination and Decommissioning
TI 2600/003	Operational Safety Review

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

70-1113/00-07-01 EEI Failure to maintain control of licensed material not in storage.

Closed

None

Discussed

None

ACRONYMS

ALARA	As Low As Reasonably Achievable
CaF ₂	calcium fluoride
CFR	Code of Federal Regulations
EAL	Environmental Action Level
EI	Escalated Enforcement Item
EHS	Environment, Health and Safety
FMO	Fuel Manufacturing Operation
g/cc	grams per cubic centimeter
IP	inspection procedure
ISA	Integrated Safety Analysis
MC&A	Material Control and Accounting
mrem/yr	millirem/year
NDA	Non-Destructive Assay
NMED	Nuclear Material Event Database
pCi/L	picocuries per liter
Sx	solvent extraction
URU	Uranium Recovery Unit
WWTF	Waste Water Treatment Facility