April 11, 2005

Mr. Christopher J. Monetta, Mail Code J26
EHS Manager
GE Nuclear Energy
PO Box 780
Wilmington, NC 28402-0780

SUBJECT: NRC INSPECTION REPORT 07200001/2005-001(DNMS) - G.E. Morris

Dear Mr. Monetta:

This refers to the routine safety inspection conducted on March 21-23, 2005, at your Morris, Illinois facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. Specifically, the inspection included evaluations of management organization and controls, fuel basin safety, radioactive waste management, environmental protection, radiation protection, facility changes, surveillance and maintenance, emergency preparedness, and fire protection. At the conclusion of the inspection, the findings were discussed with Mr. J. E. Ellis of your staff.

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

Within the scope of the inspection, no violations of NRC requirements were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). The NRC's document system is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Jamnes L. Cameron, Chief
Decommissioning Branch

Docket No. 07200001
License No. SMB-2500

Enclosure: Inspection Report 07200001/2005-001(DNMS)

See Attached Distribution

DOCUMENT NAME: E:\Filenet\ML051010351.wpd
To receive a copy of this document, indicate in the box: **C** = Copy without enclosure **E** = Copy with enclosure **N** = No copy

OFFICE	RIII		RIII		RIII		RIII		RIII	
NAME	Landsman:mb		Cameron							
DATE	04/05/05		04/11/05							

OFFICIAL RECORD COPY

cc w/encl: J. E. Ellis, Manager, Morris Operation
E. W. Secko, Regulatory Compliance Manager

Distribution:
G. E. Grant, RIII
M. L. Dapas, RIII
RIII Enforcement Coordinator
R. Bellamy, RI
D. B. Spitzberg, RIV
PUBLIC (IE 07)

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.	07200001
License No.	SNM-2500
Report No.	07200001/2005-001(DNMS)
Licensee:	General Electric Company
Facility:	Morris Operation
Location:	7555 East Collins Road Morris, IL 60450
Dates:	March 21-23, 2005
Inspectors:	Magdalena R. Gryglak, Decommissioning Inspector Ross B. Landsman, Project Engineer
Approved by:	Jamnes L. Cameron, Chief Decommissioning Branch Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

General Electric Company
Morris, IL 60521
NRC Inspection Report 07200001/2005-001(DNMS)

The inspection involved the review and observation of selected aspects of licensee management organization and controls, fuel basin safety, radioactive waste management, environmental protection, radiation protection, changes to the facility, surveillance and maintenance, emergency preparedness, and fire protection (IP 60855).

Management Organization and Controls

- The staffing levels at the site were consistent with Technical Specifications. (Section 1)

Basin Safety

- The licensee can readily accommodate various conditions that might challenge basin level or cooling. (Section 2)

Radioactive Waste Management

- The licensee's management of the radioactive waste program was consistent with the requirements of the license. (Section 3)

Environmental Protection

- The licensee's environmental protection program was consistent with the requirements of the regulations and the license. (Section 4)

Radiation Protection

- The licensee's radiation protection program was consistent with the requirements of the regulations and the license. The independent audits of the RP program were broad in scope and the findings well documented. (Section 5)

Changes to the Facility

- The licensee’s efforts to remove unnecessary debris and equipment (and associated environmental hazards) continue to be a positive initiative. (Section 6)

Surveillance and Maintenance

- The licensee performed the surveillance activities specified in the Technical Specifications. Results of air effluent activity, sanitary lagoons activity, leakage of sealed sources, calibration and operability of instrumentation, and water conductivity indicate compliance with the regulatory requirements. (Section 7)

Emergency Preparedness and Fire Protection

- The licensee has satisfied the conditions of its license and the associated Technical Specifications regarding the Emergency Preparedness and Fire Protection programs. (Section 8)

Report Details

1.0 Management Organization and Controls

a. Inspection Scope

The inspectors evaluated plant staffing relative to the license.

b. Observations and Findings

The direct GE staff has been reduced through attrition to 14 personnel. In addition, there are security officers assigned to the site.

c. Conclusions

The staffing levels at the site were consistent with Technical Specifications.

2.0 Spent Fuel Pool Safety

a. Scope

The inspectors evaluated the spent fuel pool storage basin (SFB) and basin safety. Factors considered in the evaluation included: siphon and drain protection; SFB instrumentation, alarms and leakage detection; SFB chemistry and cleanliness control; criticality controls; and SFB operation and power supplies.

b. Observations and Findings

The spent fuel pool storage basin was constructed of reinforced concrete and lined with stainless steel. There were no postulated failures in the design basis for the pool that could cause a loss of water below the top of the fuel assemblies.

The basin cooling system and filtration system were the only two systems penetrating the basin walls. The filtration system took its suction from weirs at the water surface while the cooling system took its suction from piping penetrating the basin walls at approximately the water surface and extending approximately three feet below the surface. Both systems returned water to the basin bottom through piping penetrating the basin walls, also at the approximate water surface and extending downward. Outside the basin, the supply and return piping was located approximately two feet below the water surface at its deepest. Thus, any breakage (leakage) outside of the pool could only drain the water down about two feet. The licensee maintained the water level approximately 13 feet above the fuel.

Basin instrumentation consisted of a leak detection system which included a leak detection sump. Operation of this system ensured that a leak in the basin would be promptly detected so that corrective action could be initiated. The amount of water pumped from the sump was trended daily, and remained consistent since the last inspection. The licensee performed weekly operability tests and monthly calibrations of the system.

Other basin instrumentation consisted of area radiation monitors and criticality monitors. The licensee also performed the required operability tests and calibrations of these instruments.

With issuance of the new Technical Specifications, basin water quality will be controlled by its conductivity, rather than by its pH. Conductivity had been shown by the licensee to be an acceptable method of verifying the purity and nonaggressive nature of the water in the spent fuel storage basin.

c. Conclusion

The licensee adequately maintained fuel basin safety, and incorporated controls to mitigate various conditions that could challenge basin water level or cooling.

3.0 Radioactive Waste Management

a. Inspection Scope

The inspectors toured facilities where radioactive waste was stored and reviewed shipping documents for several radioactive materials shipments.

b. Observations and Findings

Some contaminated equipment and scaffolding remained on site and was stored in containers or in rooms in the facility. All the containers housing waste were properly marked and labeled and other areas containing waste had been appropriately posted and controlled.

Since the last inspection, the licensee made three nonexempt radioactive materials shipments. The materials shipped included: two in calendar year 2002, a 20-feet C-van with low specific activity (LSA-I) and a 20-feet C-van with LSA-II contaminated equipment and dry active waste (DAW); and one in calendar year 2003, a 20-feet C-van with LSA-II contaminated equipment and DAW.

Each shipment arrived at the respective destinations without incident. The shipping documents indicated that the shipments had been made in compliance with NRC and Department of Transportation regulations.

c. Conclusions

The licensee's management of the radioactive waste program was consistent with the requirements of the license and applicable regulations.

4.0 Environmental Protection

a. Inspection Scope

The inspectors reviewed documents pertaining to the environmental protection program and interviewed individuals directly involved with the program.

b. Observations and Findings

The inspectors reviewed the February 12, 2003, February 19, 2004, and February 15, 2005, letters to the NRC reporting the results of the licensee's environmental monitoring program for calendar years 2002, 2003, and 2004 respectively. The inspectors also reviewed selected environmental monitoring records for those years.

The maximum potential committed effective dose equivalent to a member of the public resulting from all effluent releases and direct radiation from operational activities in calendar years 2002, 2003, and 2004 was 0.34 millirem (mrem), 0.126 mrem, and 0.0189 mrem, respectively. These values were well below the limits specified in 10 CFR 72.104 and 10 CFR 72.106.

c. Conclusions

The licensee's environmental protection program was consistent with the requirements of the regulations and the license.

5.0 Radiation Protection

a. Inspection Scope

The inspectors toured the facility, reviewed radiation protection documents and procedures and interviewed individuals directly involved with the radiation protection program (RP).

b. Observations and Findings

The inspectors reviewed the exposure results for workers at the facility for calendar years 2002, 2003, and 2004. During 2002, the two highest radiation exposures were 256 and 129 millirem total effective dose equivalent (TEDE), resulting from special equipment removal activities. During 2003, the two highest radiation exposures were 200 and 176 millirem TEDE, resulting from special fuel inventory activities. During 2004, the two highest radiation exposures were 270 and 179 millirem TEDE, resulting from the basin conductivity test. The inspectors also noted that the yearly urinalysis had been stopped as a routine test because the quarterly whole body counts would pick up any intakes before the annual test due to the inhalation class of the radioactive materials. Reviews of the Safety Committee meetings indicated that the doses to the workers were routinely reviewed at the monthly meetings.

Yearly audits of the radiation program were conducted to assess compliance with NRC regulations, facility license requirements, and internal procedures. Areas examined during the audits included, but were not limited to radiation protection program content and implementation, radiation worker training, and environmental monitoring. From a review of the calendar year 2002, 2003, and 2004 audits, no safety significant issues were identified by the auditors. Several areas needing improvement were noted, as were recommendations to improve the program administratively. These were all appropriately addressed by the staff. Overall, the auditors determined that the implementation of the radiation protection program was adequate.

c. Conclusions

The licensee's radiation protection program was consistent with the requirements of the license and regulations. The independent audits of the RP program were broad in scope and the findings well documented.

6.0 Changes to the Facility

a. Inspection Scope

The inspectors toured the facility and discussed changes made to the facility since the previous inspection in June 2002. The inspectors also reviewed the licensee's records for 10 CFR 72.48 evaluations for changes to the facility.

b. Observations and Findings

Since the last inspection, the licensee had not made any physical changes to the facility, except for security upgrades. However, the licensee continued to remove unnecessary debris and equipment (and associated environmental hazards). The changes to the Safety Analysis Report and the revised Technical Specifications did not require a 72.48 evaluation, since they were approved as part of the license renewal.

c. Conclusions

The licensee's efforts to remove unnecessary debris and equipment (and associated environmental hazards) continued to be a positive initiative.

7.0 Surveillance and Maintenance

a. Inspection Scope

The inspectors reviewed the licensee's surveillance records to ensure compliance with the renewed license and the Technical Specifications.

b. Observations and Findings

The inspectors reviewed the licensee's records of air effluent activity, sanitary lagoons activity, leakage of sealed sources, calibration and operability of instrumentation, and water conductivity. The licensee monitored the concentrations of radioactive materials in the effluent air on a weekly basis and the two sanitary lagoons on a monthly basis. Reviews of records indicated that the air exhausted from the main stack was well below the limits in the Technical Specifications. The concentration of radioactive materials discharged to the lagoons were also below the limits in the Technical Specifications. The licensee possessed only a few sealed sources. The results of dry wipe tests indicated no significant surface contamination or leakage. The inspectors reviewed the Area Radiation Monitors (ARMs) records. The licensee performed instrumentation checks to ensure proper calibration and operability. During the period inspected, only one ARM was found inoperable during the surveillance activities. As corrective measures, the licensee performed the operability checks daily. Another surveillance requirement specified in the Technical Specifications was the conductivity of water in the SFB to maintain a benign environment for fuel and equipment stored in the SFB. The

review of licensee records indicated a small amount of radioactive material in SFB water, which was well within the regulatory requirements.

c. Conclusions

The licensee performed the required surveillance activities specified in the Technical Specifications. Results of air effluent activity, sanitary lagoons activity, leakage of sealed sources, calibration and operability of instrumentation, and water conductivity indicated that the results of all surveillance were within the regulatory requirements.

8.0 Emergency Preparedness and Fire Protection

a. Inspection Scope

The inspectors reviewed the current Emergency Plan to ensure compliance with the license and the associated Technical Specifications.

b. Observations and Findings

The inspectors reviewed the Morris Operation Emergency Plan, which contained an updated letter to the file, dated January 5, 2005. The letter documented the fulfillment of the annual review of the Emergency Plan by the licensee, that documented that the plan was current and adequately described information and activities needed for emergency response reflecting the condition of the facility. The inspectors also reviewed the emergency plan procedure, MOI 233, "Situation Plan," dated December 3, 2004, which contained the potential accident scenarios and listed the sequence of actions needed by the licensee to mitigate consequences of the potential accidents. Some of the scenarios included radiological spills and radioactive material releases and exposures, failure of safety equipment, fires and explosions. The inspectors determined that the Emergency Plan and the procedure met all the conditions in 10 CFR 72.32, were adequate, and reflected the current condition of the facility. The inspectors also reviewed letters of agreement with a local medical facility, the Coal City Fire Department, and the Grundy County Sheriff. The letters of agreement were current.

The licensee did not have a separate plan for fire protection. Fire protection had been adequately addressed in the Emergency Plan and the Situation Plan. The inspectors also toured areas of the facility and assessed their conditions. In many rooms of the building, the licensee had removed unused equipment and combustibles as potential fire hazards. The rooms were generally clean and free of debris.

c. Conclusions

The licensee had satisfied the conditions of its license and the associated Technical Specifications regarding the Emergency Preparedness and Fire Protection programs.

9.0 Exit Meeting

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on March 23, 2005. The licensee acknowledged the findings presented.

During the course of the inspection, the licensee did not identify any of the documents reviewed or statements or references to specific processes as proprietary.

PERSONS CONTACTED

J. Ellis, Plant Manager
E. Secko, Regulatory Compliance Manager

INSPECTION PROCEDURES USED

60855	Operation of an ISFSI

LIST OF ACRONYMS USED

ARM	Area Radiation Monitors
DAW	Dry Active Waste
LSA	Low Specific Activity
mrem	millirem
RP	Radiation Protection
SFB	Spent Pool Storage Basin
TEDE	total effective dose equivalent