

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 70-1308/80-02

Docket No. 70-1308

License No. SNM-1265

Licensee: General Electric Company
175 Curtner Avenue
San Jose, CA 95125

Facility Name: Morris Operation

Inspection At: Morris Operation, Morris, IL

Inspection Conducted: March 21, 26, and 27, 1980

Inspector: *for W. L. Fisher*
C. C. Peck

4/30/80

Approved By: *W. L. Fisher*
W. L. Fisher, Chief
Fuel Facility Projects and
Radiation Support Section

4/30/80

Inspection Summary

Inspection on March 21, 26, 27, 1980 (Report No. 70-1308/80-02)

Areas Inspected: Routine, announced health and safety inspection, including: organization, fuel storage and handling, facility changes and modifications, surveillance testing, internal exposure control, external exposure control, and a followup of IE Bulletin 79-19. The inspection involved 18 inspector-hours on site by one NRC inspector.

Results: No items of noncompliance were identified in the seven areas inspected.

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DETAILS

1. Persons Contacted

*E. E. Voiland, Plant Manager
*T. E. Ingels, Manager, Quality Assurance and Safeguards
*K. J. Eger, Senior Engineer, Licensing and Radiological Safety
*H. R. Strickler, Operations Manager
*J. P. Kesman, Plant Engineering and Maintenance Manager
J. E. McGrath, Plant Safety Supervisor
N. P. Shaikh, Operations Engineer
K. A. Astrom, Specialist, Field Services

*Denotes those present at the exit interview.

2. General

The inspection began at 12:00 p.m. on March 21, 1980, with observation of the receipt and unloading of the twelfth in a series of spent fuel shipments from the San Onofre reactor. The remainder of the inspection was conducted on March 26 and 27.

3. Organization

Mr. J. E. Van Hoomissen has replaced Mr. L. L. Zahn, Jr. as Manager of Spent Fuel Services Operations.

4. Fuel Receipt and Storage

A series of spent fuel shipments from the San Onofre reactor began in January 1980. The shipments were to have begun in mid-1979 but were delayed because certification of NFS-4 type casks was suspended temporarily pending a study and testing of some changes that were made to some of the casks. In early 1980, use of the casks for dry shipments was approved, by which time the San Onofre fuel had cooled sufficiently to permit dry shipments.

Shipments have been accomplished without incident. The inspector examined radiation and contamination survey records for each of the shipments and found that there had been no measurements exceeding DOT limits. The receipt and a portion of the unloading of the twelfth shipment was observed during the inspection. The maximum radiation level found on the cask surface was 90 mR/hr at the impact limiter, and the maximum smearable contamination found was about 6000 dpm/100cm². Limits are 200 mR/hr and 22,000 dpm/100cm², respectively.

No items of noncompliance were identified.

5. Radiation Protection

a. External Exposure Control

Monthly film badge records were examined but not in detail. No problems were identified.

b. Internal Exposure Control

The March 1979 urinalysis for one individual disclosed a cesium-137 concentration that could possibly represent a dose greater than 40 MPC-hours (Report No. 79-03). A subsequent urinalysis showed a reduction in cesium-137 from $1.2 \text{ E-}06 \text{ } \mu\text{Ci/ml}$ to $3.6 \text{ E-}07 \text{ } \mu\text{Ci/ml}$, and quarterly samples have since indicated concentrations of gamma emitters less than $1\text{E-}07 \text{ } \mu\text{Ci/ml}$. A whole body count in April 1979 indicated 1.1% of MPBB for cobalt-60 and smaller percentages for the other gamma emitters. Efforts to determine the cause of the high original urinalysis disclosed that the uptake probably occurred during work in the sample cell in the laboratory. The ratio of cesium isotopes in the sample from the sample cell was about the same as that in the urine sample. As a result of this finding, an SWP which includes respiratory protection is now required for work in the cell.

Quarterly urinalyses for all workers since May 1979 and whole body counts in November 1979 indicated no significant exposures.

No items of noncompliance were identified.

6. Surveillance Tests

Records of routine compliance and operability tests conducted since June 1979 were examined. All tests have been conducted at their required frequencies. The tests have disclosed no unsafe conditions or trends.

Fuel basin water quality remains within operating specifications in both chemical and radioactivity content. The water activity was about $2 \text{ E-}04 \text{ } \mu\text{Ci/ml}$ at the time of the inspection.

No items of noncompliance were identified.

7. IE Bulletin 79-19

Actions taken by the licensee in response to IE Bulletin 79-19 were examined. The program for transfer, packaging, and shipping of waste materials was reviewed. Findings are summarized below:

- . The licensee maintains current DOT and NRC regulations
- . Copies of burial site requirements are maintained.
- . Management approved procedures in the form of SOP's covering handling, transfer, storage, packaging, and package surveys are maintained.
- . Training for persons involved in the transfer, packaging, and transport of low-level waste has been implemented. A manual entitled "LSA Management at MO" was prepared and used for the training of involved workers. Written quizzes were used to test employee knowledge of the subject matter. Training records are maintained. In addition, a videotape was prepared to instruct employees in correct waste handling and packaging techniques. Retraining will be scheduled periodically, at least biennially.
- . The licensee has a management-approved audit program which includes examination of low-level waste management. The inspector reviewed an audit of the waste system conducted by personnel from the company's San Jose office within 60 days after issuance of IE Bulletin 79-19. Increased emphasis in the training program described in the preceding paragraph resulted from the audit.
- . Waste packages on hand were inspected. There were no apparent problems. Because the facility does not normally have problems of liquid waste solidification and absorption, no packages were opened.

8. Exit Interview

The inspector met with licensee representatives identified in Paragraph 1 at the conclusion of the inspection. The inspector reviewed the scope of the inspection and stated that no items of non-compliance had been identified.

Contemplated future facility changes and improvements were discussed.