U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-30/94001(DRSS); 50-185/94001(DRSS)

Dockets No. 50-30; 50-185 Licenses No. TR-3; R-93

Licensee: National Aeronautics and Space Administration
Lewis Research Center
Plum Brook Station
Sandusky, OH 44870

Facility Name: Plum Brook Reactor Facility

Inspection At: Plum Brook Reactor Site, Sandusky, Ohio

Inspection Conducted: January 3, 1994

Inspector: C. Cox 1/12/94 Date

Approved By: J. W. McCormick-Barger, Chief 1/12/94 Date
Radiological Programs Section 1

Inspection Summary

Inspection on January 3, 1994 (Reports No. 50-30/94001(DRSS); No. 50-185/94001(DRSS))
Areas Inspected: Routine, announced inspection of the Plum Brook Reactor and Plum Brook Mock-up Reactor to review actions on: organization and records; surveillance; review and audit functions; radiation controls; and review of periodic and special reports (40755).
Results: No violations or deviations were identified. Records were well kept and easy to track. Audits were thorough and well documented. Safety Committee meeting minutes were up to date and detailed. The new 10 Code of Federal Regulation (CFR) Part 20 was successfully implemented. The surveillance program was very well implemented and a strength at the facility.

DETAILS

1. Persons Contacted

National Aeronautics and Space Administration

*H. Pfanner, Plum Brook Reactor Facility (PBRF) Engineer

*Denotes those attending the exit meeting on January 3, 1994

The inspector also interviewed other personnel during the course of the inspection.

2. General (40755)

This inspection, which was held on January 3, 1994, was conducted to examine the long-term storage programs under possession-only licenses for the Plum Brook and Plum Brook Mock-up reactors. The facility was toured shortly after arrival. The Plum Brook Mock-up Reactor (MUR) was located inside the Plum Brook Reactor building. The general housekeeping of the facility was good. No fuel was stored at the facility and the reactor vessel was inerted with nitrogen.

No violations or deviations were identified.

3. Organization and Records (40755)

The facility organization was reviewed and verified to be consistent with the Technical Specifications. The organization remained essentially the same as described in Inspection Reports No. 50-30/90001 (DRSS) and 50-185/90001(DRSS) with the exception of the general contractor supplying maintenance and health physics support. The general contractor changed from Sverdrup Corporation to Gilcrest Electric. However, the maintenance and health physics personnel from Sverdrup that were working at PBRF were incorporated into Gilcrest. Therefore the change had no effect on maintaining the long-term storage of the facility.

The reactor records were reviewed. Required records were kept and easy to retrieve. Records such as sump levels, inerting gas usage and radiation surveys were reviewed by the PBRF Engineer to detect trends or any abnormalities.

No violations or deviations were identified.

4. Surveillance (40755)

The inspector reviewed the Technical Specifications, procedures, surveillance test schedules, and test records. Procedures were available and detailed. Surveillances identified in the Technical Specifications were completed in the required timeframes. Records were accurate and easy to retrieve. The overall surveillance program was a strength at this possession-only licensee.

No violations or deviations were identified.

5. Reviews and Audits (40755)

The licensee's review and audit program records were reviewed by the inspector. The PBRF Safety Committee met twice a year as required by Technical Specifications. A new member, Mr. Paulsen, was added in 1993 to replace a member who left in 1991. Mr. Paulsen's qualifications met the requirements of the Technical Specifications for the PBRF Safety Committee. The PBRF Safety Committee reviewed three facility modifications since the last inspection. Two of the modifications were for electrical disconnect switches for cranes safety and the other modification was for removal of piping interference for a sump pump replacement. The reviews of the modifications were adequate and the modification packages were well written.

Review of the 1991, 1992, and 1993 audit records indicated that the Technical Specifications were being met. The audits were good with no significant findings.

No violations or deviations were identified.

6. Radiological Controls (40755)

A facility tour indicated that posting and label requirements were being met. Radiological surveys were conducted to met Technical Specification requirements. To implement the new 10 Code of Federal Regulations Part 20 (10 CFR 20), the previous Radiation Safety Officer was hired through Gilcrest Electric to evaluate the new 20 CFR 20, make the required changes to the radiation protection program and procedures, and to train the necessary personnel. The changes and training were completed in the Fall of 1993 and the facility was ready to implement the program by January 1, 1994. The inspector reviewed the changes and found the program adequate.

No violations or deviations were identified.

7. Review of Periodic and Special Reports

Annual reports for 1990, 1991, and 1992 were reviewed and met the requirements in the Technical Specifications.

No violations or deviations were identified.

8. Exit Interview (30703)

The inspector met with the licensee representative denoted in Paragraph 1 at the conclusion of the inspection on January 3, 1994. The inspector summarized the scope and results of the inspection and discussed the likely content of this inspection report. The licensee acknowledged the information and did not indicate that any of the information disclosed during the inspection could be considered proprietary in nature.