



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

MAY 09 1985

Report No.: 70-1201/85-02

Licensee: Babcock and Wilcox Company
Commercial Nuclear Fuel Plant
Lynchburg, VA 24505

Docket No.: 70-1201 (CNFP)

License No.: SNM-1168

Facility Name: Commercial Nuclear Fuel Plant

Inspection Conducted: April 24-26, 1985

Inspector:

G. L. Troup

5/6/85
Date Signed

Approved by:

E. J. McAlpine, Chief
Material Control and Accountability Section
Nuclear Materials Safety and Safeguards Branch
Division of Radiation Safety and Safeguards

5/6/85
Date Signed

SUMMARY

Scope: This routine, unannounced inspection involved 19 inspector-hours on site in the areas of Management Organization and Controls, Training, Nuclear Criticality Safety, Procedures, Operations Review and Audits.

Results: No violations or deviations were identified.

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REPORT DETAILS

1. Licensee Employees Contacted

R. A. Alto, Plant Manager
*L. T. Lee, Manager, Fuel Manufacturing
*W. T. Engelke, Manager, Technical Control
*J. Ficor, Manager, Quality Assurance
*D. V. Ferree, Manager, Special Projects
*J. T. Ford, Regulatory Control Manager
*J. P. Watters, License and Control Administrator
*K. E. Shy, Health Physicist
J. E. Glass, Safeguards Coordinator

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

Other Organization

F. M. Alcorn, Supervisor, Nuclear Criticality Safety (LRC)

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 26, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Management Organization and Controls (88005)

- a. D. W. Zeff, formerly Materials and Facilities Manager, has been transferred to another position in the company. R. A. Alto, Plant Manager, is temporarily acting in the position of Materials and Facilities Manager until a new person is selected.
- b. The inspector verified that the organization of management and health safety conforms to the organization described in the amendment application dated May 4, 1984, and incorporated into the license by Amendment No. 2, dated August 1, 1984. No violations were identified.

- c. The inspector reviewed the agenda and minutes for the Safety Review Board meetings on September 24 and December 6, 1984 and March 19, 1985. The frequency of the meetings, the attendees, and the topics covered met the license requirements and the licensee procedure requirements. No violations or deviations were identified.

5. Training (88010)

- a. The inspector examined the radiation worker retraining outline used by the licensee to perform annual retraining and retraining given to employees when they returned to work after the temporary layoff. The training agenda was comprehensive and covered regulatory, license condition and procedural requirements. A computer printout of employee training was available to show the various types of training received by employees. An examination of the records for selected individuals showed that they had received radiation protection and nuclear criticality safety retraining within the past year. No violations or deviations were identified.
- b. The inspector examined the training records for new employees and determined that they had been instructed in accordance with 10 CFR 19.12 and procedural requirements. No violations or deviations were identified.
- c. Manufacturing procedures (MA-XXXX series) specify that individuals performing operations involving Special Nuclear Materials (SNM), such as sampling or weighing, shall be qualified in accordance with procedure NM-1632, "SNM Accountability Measurement Operator Qualification." The inspector reviewed the training and qualifications records for selected operators and verified that initial training and qualification and annual requalification had been completed and documented and that minimum capabilities were documented.

6. Internal Review and Audits (88005 and 88015)

An examination of the records showed that inplant health-safety audits had been performed on a weekly basis and that independent nuclear criticality safety and health physics audits had been performed quarterly by B&W-LRC and B&W-NNFD. The audit results showed that the licensee had been performing operations involving licensed material in accordance with the regulatory, license conditions and procedural requirements. Verification was made that audit reports were provided to the Plant Manager. No violations or deviations were identified.

7. Procedures (88005, and 88015)

- a. Licensee administrative procedures (PC-1300, Rev. 6, May 11, 1983, CNFP Procedures Numbering System, PC-1302, Rev. 1, March 30, 1981, Distribution and Control of CNFP Production Planning and Control Procedures, and PC-1330, Rev. 3, May 27, 1983, Preparation and Approval of CNFP Administrative and Operative Procedures) provide the guidance

and establish the controls for initiating, preparing, reviewing, approving, issuing, and revising licensee procedures. The above administrative procedures were reviewed by the inspector. Each functional component within the licensee's organization is responsible for their operating procedures conforming to the above procedures. The inspector verified that the manufacturing and the health safety procedures met the administrative and operative format and content requirements.

- b. The inspector reviewed 14 procedures in various functional areas which had been revised during the last 12 months and verified that the changes had been reviewed and approved in accordance with the administrative requirements. No violations were identified.
- c. During tours of plant areas, the inspector observed that operating and health safety procedures were available to workers. The inspector verified by spot-checking procedures in the work areas against the master list that current revisions are in use. No violations were identified.
- d. The inspector reviewed selected manufacturing procedures and verified that they contain nuclear safety and health safety requirements or refer to requirements posted in the operating area. During tours of the plant, the inspector observed that nuclear safety limits were posted.

8. Nuclear Criticality Safety (88015)

- a. Section V, Paragraph 5.5 of the license application requires that nuclear criticality safety analyses capability shall be available for consultation and assistance, and shall be organizationally independent of the CNFP. This function is performed by the Nuclear Criticality Safety Group at the Lynchburg Research Center. Section V, Paragraph 7.1.5 of the license application requires that a library of computer codes be maintained and utilized in conducting nuclear safety evaluations. The inspector discussed the CNFP nuclear safety evaluations with the cognizant supervisor and determined that a library of codes is maintained and utilized in performing the analyses.
- b. The inspector reviewed the nuclear safety analyses performed for two plant modifications which involved SNM. The analyses were performed by qualified individuals and were submitted to the Safety Review Board prior to being implemented. No violations were identified.
- c. The inspector reviewed the test records and verified that criticality and emergency alarms had been functionally tested monthly (January - March 1985) and had been calibrated in May 1984. The cognizant supervisor stated that the calibration was scheduled for May 1985. No violations were identified.

- d. The licensee is developing a new shipping container for SNM. A test and qualification is being established and a nuclear criticality safety evaluation is being performed. The cognizant supervisor stated that once the analysis is completed and the tests are performed, the data will be submitted to obtain a Certificate of Compliance to permit the container to be used for shipping SNM. Until that is accomplished, shipments will continue to be made with other containers which have a Certificate of Compliance.

9. Operations Review (88015, and 88020)

- a. During tours of plant areas, the inspector observed that the materials were being handled, stored, and used in accordance with posted safety limits. The inspector verified that fuel pellets in hoods and being loaded into rods were marked with the same enrichment code as the authorized posting, and had the same enrichment code as that marked on the rod end cap.
- b. The inspector observed that fuel rods were collected, stored, and transported in authorized configurations (safe slab geometry). Completed fuel bundles were stored in permanent fixtures to maintain separation.
- c. No apparent fire or industrial safety hazards were observed. General housekeeping conditions were satisfactory.
- d. The area of the plant formerly used for pellet manufacturing has been decommissioned. All of the equipment has been removed and the area decontaminated. The area has been changed from a "controlled area" to an uncontrolled area. The release of the area was reviewed and approved by the Safety Review Board at the March 19, 1985 meeting.