

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30303

Report No.: 50-537/83-09

Licensee: U. S. Department of Energy

Project Management Corporation Tennessee Valley Authority

Docket No.: 50-537

License No.: Pending

Facility Name: Clinch River Breeder Reactor Project (CRBRP)

Inspection at Babcock & Wilcox Company in Barberton, Ohio

Approved by: C. M. Upright, Section Chief

Engineering Program Branch Division of Engineering and Operational Programs

SUMMARY

Inspection on August 3-5, 1983

Areas Inspected

This routine, announced inspection involved twenty-one inspector-hours at the Barberton Works of Babcock and Wilcox Company in the areas of the applicant's surveillance of contractor QA/QC activities.

Results

Of the areas inspected, no deviations were identified.

#### REPORT DETAILS

#### 1. Persons Contacted

Applicant Employees

N. L. Myers, Senior Cost and Component Engineer

Westinghouse Electric Corporation Employees

- \*C. E. Gross, Audit Team Leader, Westinghouse Advanced Energy Systems Division (AESD)
- \*H. W. Brandt, Audit Team Member, AESD
  \*W. S. Shingler, Audit Team Member, AESD
- \*R. J. Smeenge, Audit Team Member, Oak Ridge, Senior QA Engineer

Babcock and Wilcox Company Employees

- \*H. C. Graber, Manager, Inspection and Test \*T. F. Hash, Manager, Quality Assurance (CA)
- \*R. S. Kester, Quality Assurance Engineer
- \*E. M. Livingston, Component and Technology Engineer
- \*L. E. Metric, Jr., Manager Materials Procurement Planning and Control
- \*J. Pletcher, Contract Purchasing
- \*J. R. Roland, Internal Audit Administrator
- \*A. Smith, Jr., Manager, Vendor Quality Assurance
- \*E. Snicer, Quality Assurance Engineer
- \*L. E. Spry, Manager, Division Quality Assurance Engineering
- J. J. Zadiraka, Quality Assurance Engineer
- \*L. A. Zurcher, Project Manager

#### 2. Exit Interview

The inspection scope and findings were summarized on August 5, 1983, with those persons indicated in paragraph 1 above. The applicant acknowledged the inspection findings.

3. Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

<sup>\*</sup>Attended exit interview

## 5. Audit of Applicant's Surveillance of Contractor QA/QC Activities (35020B)

### a. Scope of Inspection

This inspection was conducted to ascertain whether the applicant's execution of quality assurance responsibilities relating to surveillance of contractors is consistent with the status of the nuclear project and the Quality Assurance Program described in the CRBRP Safety Evaluation Report (SER) March 1983, Section 17, Quality Assurance. This program describes the relationships between the owner which is the Department of Energy (DOE) and the various participants in the project. Westinghouse is the Lead Reactor Manufacturer (LRM); General Electric and Atomics International are Reactor Manufacturers (RM) and each is responsible for the QA program applied to the design, procurement, and manufacture of the safety-related structures, systems, and components they supply. CRBRP Project Office QA maintains responsibility for the establishment and execution of the quality assurance program; however, the LRM has been delegated responsibility for surveillance of the reactor manufacturers to ensure that suppliers are performing work in accordance with approved supplier QA programs during design, procurement, fabrication, testing, and shipping.

## b. Applicant Preparation

With the assistance of the audit team members the inspector reviewed the following:

Procurement documents relating to the scope of work and QA/QC responsibilities delegated to the contractor

Plans and activities relating to the attainment of overall surveillance objectives

- Surveillance plan and checklist developed to implement the plan

Adequacy of the plan and checklist to accomplish the overall objective

## c. Audit of Applicant Surveillance Activities

The inspector observed the presurveillance conference, execution of surveillance by members of the team, identification and summarization of findings, attainment of planned surveillance objectives, and the exit critique.

# d. Implementation

The primary purpose of this inspection was to examine the implementation of the applicant's QA Program as performed by the LRM of activities associated with the procurement, fabrication, inspection, and testing of the Fixed Radial Shield and the Outlet Nozzle Liner being manufactured by the Babcock and Wilcox Company, Barberton, Ohio.

The inspector concluded that the team performed an indepth review of the contractors procurement, fabrication, inspection, testing, documentation, auditors qualifications, and nonconformance control. Team members were well prepared and very knowledgeable of contractual and QA requirements.

During this surveillance the team members identified five findings. The two generic findings involved B&W's failure to incorporate AESD E-Spec requirements into procurement documents and failure to specify RDTF2-2 as the applicable Quality Assurance document. This item is identified as inspector follow-up item 50-537/83-09-01, Failure to incorporate RDT F2-2 and E-Spec requirements.

Within this area, no deviations were identified.