

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

Report No. 99900266/80-02

Program No. 51300

Company: Rockwell International Inc.
Energy Systems Group
8900 De Soto Street
Canoga Park, CA 91304

Inspection
Conducted: December 8-11, 1980

Inspectors:

V. H. Hunter

V. H. Hunter, Contractor Inspector
Components Section I,
Vendor Inspection Branch

12/29/80
Date

Approved by:

D. E. Whitesell

D. E. Whitesell, Chief
Components Section I,
Vendor Inspection Branch

12/29/80
Date

Summary

Inspection on December 8-11, 1980 (99900266/80-02)

Areas Inspected: Implementation of Appendix B, to 10 CFR 50 and applicable codes and standards, including training, audits, manufacturing processes and Authorized Nuclear Inspection interface. The inspection involved twenty-eight (28) inspector hours on site.

Results: In the four (4) areas inspected, there were no apparent deviations in three (3) areas. The following deviation was identified in the remaining area:

Deviation: Contrary to Criterion V of Appendix B to 10 CFR 50 and the ASME accepted QA Manual, two (2) welders were performing welding operations without valid weld qualifications.

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DETAILS SECTION

A. Principal Persons Contacted

R. J. McDermott, Director, Quality Assurance
G. Hallinan, Director, Steam Generator Program
C. C. Conners, Manager, Design Engineering
W. H. Knight, Manager, QA Inspection and Test
F. A. Hunter, Manager, General Fabrication
D. N. Glass, Manager, QA Audits and Controls
R. J. Gallagher, Welding Engineer
R. L. Jaseph, Quality Assurance Auditor

All of the above persons attended the exit meeting.

B. Vendor Activities - General

The Energy Systems Group (ESG) is a division of the Rockwell International Inc. The primary product of ESG is hydrogen recombiners that remove the excess hydrogen and oxygen from containment structures of both boiling water and pressurized water cooled reactors.

ESG is a major supplier of recombiners to the nuclear industry and constitutes approximately 65% of their current shop loading.

The ASG facility at Canoga Park, CA, holds ASME certifications N-2153 (N-Symbol) for construction of Section III, Division I items and N-2154-1 (NA-Symbol) for Class 1, 2, and 3 and MC Component parts and appurtenances and component supports; Class 1, 2, and 3 piping subassemblies and Class CS Core support structures parts. These certificates expire on June 16, 1981.

The ESG facility is comprised of approximately 540,000 square feet and staffed with 2,225 personnel. Other products and/or services provided to the nuclear industry by ESG are:

1. Inservice inspection systems for ASME Section XI preservice and inservice inspection of nuclear power plants.
2. Remote handling equipment.
3. Reactor pressure vessel materials surveillance services.
4. Decontamination and decommissioning of nuclear facilities.
5. Equipment monitoring systems.
6. Nuclear training program that includes specialized training for nuclear industry managers, engineers, technicians, and operators.

C. Training

1. Inspection Objectives

The objectives of this inspection were;

- a. To ascertain that programs are established for indoctrination and training of personnel performing activities affecting quality.
- b. To ascertain that indoctrination and training measures are effectively implemented.

2. Method of Accomplishment

The preceding objectives were accomplished by review of the following documentation:

- a. N6.02 of the ASME accepted QA Manual.
- b. TI-001-10-002 titled, "Monthly Welding Procedure and Personnel Roster."
- c. TI-001-100-005 titled, "Stamp and Certification Roster."
- d. QAI N6.02A titled, "Qualification and Certification of NDE Personnel."
- e. QAOP N6-01 titled, "Qualification of Welding Procedures and Personnel."

3. Inspection Findings

- a. Deviation - See Notice of Deviation
- b. Unresolved Items - None were identified.

D. Audit Control

1. Objectives

The objectives of this area of the inspection were to verify that programs were established for indoctrination and/or training of personnel performing activities affecting quality and that indoctrination and training measures were effectively implemented.

2. Method of Accomplishment:

The preceding objectives were accomplished by:

- a. Review of Section 14.0 of the ASME accepted QA Manual to verify that:
 - (1) Procedures and policy documents identify organizations responsible for audits and define their responsibilities and authorities.

- (2) Measures have been established to assure that auditors are independent of any direct responsibility for performance of activities which they are auditing.
- b. Review of Procedure SPP-203 and personnel qualifications to verify that:
 - (1) Audit personnel are trained and qualified.
 - (2) Provisions exist for reporting on the effectiveness of QA Program to responsible management.
 - (3) Provisions have been made for re-audit of deficient areas.
 - (4) Audits are scheduled and performed in accordance with approved check list.
- c. Review of audit records to verify that:
 - (1) Audits are performed in accordance with approved procedures and instructions by qualified personnel.
 - (2) Corrective actions are taken for deficiencies identified by audits.

3. Inspection Results

There were no deviations or unresolved items identified.

E. Manufacturing Process Control

1. Objectives

The objectives of this area of the inspection were to verify that the vendor's manufacturing processes were:

- a. Performed under a control system which meets the NRC rules and regulations, ASME Code requirements, the vendor's commitments in his ASME accepted Quality Assurance Program, and contract requirements.
- b. Effective in assuring product quality.

2. Method of Accomplishment

The objectives of this area of the inspection were accomplished by:

- a. Review of the ASME accepted Quality Assurance Manual, Section 9, revision 4, titled, "Control of Construction Process" to verify that procedures had been established which prescribes a control system of the manufacturing processes.
- b. Review of the projects inspection plan to verify that control check lists, are prepared which identifies the document numbers and revisions to which the process must conform. Also to verify that all processes and tests are to be performed by qualified personnel using qualified procedures.
- c. Review of the shop traveler, or process control check lists, to verify that spaces are provided for reporting the results of specific operations, or reference to other documents where the results are maintained. Also that it includes space for the signoff by the vendor, indicating the date on which the operation or tests was performed, and space for signoff and date, by the authorized nuclear inspector, to document his acceptance of activities that he has selected as mandatory hold points.
- d. Observed the following processes:
 - (1) Liquid penetrant test of mechanical top assembly welds 3, 4, and 11 in accordance with procedure No. N070 NDT-03, revision 0.
 - (2) Radiographic set up per procedure N010 NDT-02 and technique sheet N1-0069-S.
 - (3) In process welding of reactor chamber and coil assembly, welds 5-18-19 and 20, Part No. N139000224-901 in accordance with weld procedure WP-001-140-173.

to verify their compliance with the above referenced procedures, and the overall QA program documentation requirements, including the establishment of mandatory hold points by the authorized nuclear inspector.

- e. Interviews with personnel to verify they are knowledgeable in the procedures applicable to manufacturing process control.

3. Findings

- a. The inspector verified that the vendor's manufacturing processes are performed under a controlled system which is consistent with the NRC rules and regulations, the Code requirements, the Quality Assurance Program commitments, and that the system is effective in achieving the specified product quality.

- b. Within this area of the inspection, no deviations or unresolved items were identified.

F. Exit Interview

The inspector met with management representatives (denoted in paragraph A) at the conclusion of the inspection on December 11, 1980. The management representatives acknowledged the statements by the inspector that no deviations or unresolved items were identified during this inspection.