

U. S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I

RO Inspection Report No.: 50-363/73-02

Docket No.: 50-363

Licensee: Jersey Central Power & Light Co./General Public
Utilities
Madison Avenue & Punchbowl Rd.
Morristown, New Jersey 07960
(Forked River Unit No. 1)

License No.: _____

Priority: _____

Category: A-1

Location: Lacey Township, New Jersey

Type of Licensee: Power 1070 MWe

Type of Inspection: Quality Assurance Program Implementation

Dates of Inspection: April 30 and May 2, 1973

Dates of Previous Inspection: June 29, 1971

Reporting Inspector: Wm. M. Hayward
Wm. M. Hayward, Reactor Inspector

May 14, 1973
Date

Accompanying Inspectors: None

Date

Date

Other Accompanying Personnel: _____

Reviewed by: J.H. Tillou
J.H. Tillou, Senior Reactor Inspector

5-14-73
Date

SUMMARY OF FINDINGS

Enforcement Action

None

Licensee Action on Previously Identified Enforcement Matters

None required

Design Changes

None

Unusual Occurrences

None

Other Significant Findings

A. Current Findings

This inspection was performed to examine that portion of the quality programming which has been updated and/or implemented subsequent to the RO:I inspection in June of 1971.

Quality program procedures to control requirements of Criterion I, II, III, IV, VII, and XVIII were examined, and were found to comply with the respective criteria. Samples, examples, and evidence of implementation of the procedures were examined, and were also found to conform to the above regulatory criteria.

B. Status of Previously Reported Unresolved Items

One outstanding item was identified in the June '71 inspection. The program had been found to omit provisions for assuring that quality requirements were included in procurement specifications. The deficiency was found to have been corrected in the applicant's program as well as in the programs provided by contractors to the applicant.

Management Interview

Persons Contacted

- E. Allen, Representing GPH, QA Management
- T. Frost, Representing Stearns-Roger, QA Management

These findings were discussed with the persons listed above.

The Quality Assurance Program documents provided to control and to implement Criteria I, II, III, IV, VII, and XVIII were inspected, and were found to comply with and implement these requirements of Appendix B, 10CFR50.

No additional findings were made.

The GPU representative acknowledged the findings.

DETAILS

1. Criterion I, Organization

Assignment of quality-determining tasks was found in the GPU program documentation. Assignment of quality determining tasks to be performed by contract organizations was found to be referenced in the PSAR and the contract conditions. The applicant was observed to have approved/accepted the several contractor/vendor QA Programs by approval signature on the face sheet of the documents, or by reports of audits, in which the programs were found acceptable. A "Vendor Documentation Cross-reference Sheet" was provided as a checklist. It was developed to designate the retained and assigned quality tasks, and to assure that all tasks were identified and responsibility assigned.

QA Program manpower requirements of skills and numbers needed was found to have been planned for a minimum of three years, and in one case for the entire design, procurement, construction phase. Each quality organization was observed to have available manpower required for the 12 month period following this inspection date. Each of the quality assurance programs was found to provide specific measures to stop work to preclude quality deficiency in product or process.

The portion of the Forked River quality programs controlling Criterion I appears to comply with and be implemented according to Criterion I requirements.

2. Criterion II Quality Assurance Program

The most recent revision to the Forked River quality program was dated May 2, 1973.

The quality assurance procedures to implement the program are all identified and issued. The procedures required to be implemented at this stage of progress of the program were found to be implemented. Results and documents were observed as evidence of implementation in compliance with those procedures.

The procedures provided pre-requisites to quality-verifying activities, instructions, and check sheets. The pre-requisites are required to be verified prior to initiation of the quality-determining tasks.

The program provides for selection and qualification of procedures and personnel for NDT and special processes. The NSS supplier demonstrated maintenance of a continuing qualification program applied to source and construction facilities.

The applicant, the NSS supplier, the A-E, and the constructor, have implemented orientation/indoctrination/training programs.

All four organizations have provided, in their quality programs, for appraisal of status and effectiveness of the quality programs for construction of the Forked River project. The appraisal controls were observed to include requirements to provide reports to corporate level Management for review, and corrective action when indicated.

The portion of the Forked River quality programs controlling Criterion II requirements appears to comply with and be implemented according to Criterion II requirements.

3. Criterion III Design Control

The Forked River quality program was observed to provide a listing of components which were identified as being subject to control of the QA Program

The program was observed to provide specific controls over deviations from quality standards contained in design specifications and drawings.

The program was found to implement the procedure for selection, and review for applicability of product and process to design requirements.

The project controls referred to in the quality program documents were observed to establish and administer the design control interfaces.

Independence of design reviewers from those providing the design was confirmed in written controls and completed portions of design. The architect engineer is formally assigned design review responsibility for all of the Forked River designs. A.G.P.U. project document was identified by the quality program as the document providing specific controls over field changes. It was confirmed that review of field changes is controlled and approved in a fashion commensurate with that for original design.

The portion of the Forked River quality program controlling Criterion III requirements appears to comply with, and be implemented according to Criterion III requirements.

4. Criterion IV Procurement Document Control

The Forked River quality program was observed to contain and implement procedural controls to assure that design and regulatory requirements were included in the procurement documents.

The program was found to require and implement specific provisions for contractors/vendors to establish/operate quality programs which comply with Appendix B requirements.

The portion of the Forked River quality program controlling Criterion IV requirements appears to comply with and be implemented according to Criterion IV requirements.

5. Criterion VII Control of Purchased Material Equipment and Services

The Forked River quality program was observed to provide procedural controls for receiving inspection in which the procurement requirements are used as acceptance standards.

The program was found to require and implement controls which evaluated and qualified potential contractors according to established written standards/requirements contained in Appendix B criteria.

The program was demonstrated to provide a quality program instruction and associated reporting format, to assure that each procured product conforms to the codes, standards, design specifications, and drawings referenced in the procurement requirements. The quality program was found to include procedural controls for an identification, retrieval and safeguard system to maintain product and process quality data.

The portion of the Forked River quality program controlling Criterion VII requirements appears to comply with and be implemented according to Criterion VII requirements.

6. Criterion XVIII Audits

The Forked River quality program was found to include provisions to control and implement the audit task. Sample audit requirements and reports were examined and found to confirm that regulatory and design requirements were being translated into engineered specifications and drawings. Audits were observed to have been performed and reported to evaluate the effectiveness of design reviews. Other such audits are in the schedule to be performed. Scope of audit schedules now appear to respond to the status or level of activity of the project. Procedures and check lists were demonstrated to have been used in performing the audits which were selected as samples for this inspection. The written controls were observed to establish the qualifications for, and independence of the auditors.

The audit procedures and reports demonstrated performance of the audits according to pre-established written requirements, and the audit reports made specific findings against those requirements. Coverletters and follow-up correspondence demonstrated delivery of the audit reports to corporate level management positions in addition to managers of areas audited. Examination of sample audit reports and corresponding letters confirmed that corrections were made to deviating conditions reported in audit findings. Subsequent re-audits reported verification of corrective actions.

The portion of the Forked River quality program controlling Criterion XVIII requirements appears to comply with and be implemented according to Criterion XVIII requirements.

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