INSPECTION PROCEDURE 49065

SAFETY-RELATED PIPING-RECORDS REVIEW

PROGRAM APPLICABILITY: 2512

49065-01 INSPECTION OBJECTIVES

01.01 To review a sample of safety-related piping records to determine whether:

a. The licensee's system for preparing, reviewing and maintaining records is functioning properly.

b. The selected records reflect work accomplishment consistent with NRC requirements and SAR commitments.

c. The records indicate any potentially generic problems, management control inadequacies or other weaknesses of safety significance.

Inspection Schedule

May Be Started	Must Be Started	Must Be Completed
After work is 30% complete.	Before work is 50% complete.	Before work is 80% complete.

49065-02 INSPECTION REQUIREMENTS

02.01 Review the licensee/contractor system for reporting and dispositioning nonconforming materials, parts, and components associated with safety-related piping to determine whether:

a. The records adequately document current status of nonconformances and deviations. Review approximately 10 nonconformance/deviation reports to sample system effectiveness.

b. The above sample of records is legible, complete and indicates reports are promptly reviewed by qualified personnel.

c. These records are routinely being processed through established channels for resolution of the immediate problem, determination of possible generic implications, and identification of trends.

d. These records are being properly identified, and stored, and can be retrieved in a reasonable time.

e. Nonconformance reports include the status of corrective action or resolution and note action to prevent recurrence.

02.02 To determine whether qualified licensee/contractor, craft, and inspection personnel are being employed on safety-related piping installation work, review a sampling (4 - 6, but no more than 10 records total) covering several different disciplines of personnel qualification records as follows:

a. Determine whether a system of personnel qualification records, meeting stated requirements, exists and is being maintained in current status.

b. Determine if the records are sufficient to reasonably support qualification in terms of certification, experience, proficiency, training, testing, etc., as applicable, and determine whether the organization has a method for verifying the accuracy of the information (e.g., verify resume data)

c. Review the action taken by responsible licensee/contractor organizations to independently authenticate the records material.

02.03 Review relevant portions of licensee/contractor audit reports concerning the installation of safety-related piping. Review 2 - 4 reports to determine whether:

a. The required audits have been performed in accordance with schedule and functional areas in established audit plans.

b. Audit findings have been reported in sufficient detail to permit a meaningful assessment by those responsible for corrective action, final disposition, and trending.

c. The licensee/contractor has taken proper followup action on those matters in need of correction and action to prevent recurrence.

d. There are trends that may indicate inadequate corrective action.

49065-03 INSPECTION GUIDANCE

General Guidance

a. Applicable portions of the SAR should have been reviewed to determine licensee documentation commitments relative to construction and inspection requirements before inspection in this area. The inspector should make this determination during inspection preparation and/or during the performance of IP 49061.

b. This procedure pertains to quality records of safety-related piping - other than the reactor coolant pressure boundary piping; that is, the systems in Quality Groups B and C as defined in Regulatory Guide 1.26 (and listed in 49063-03).

c. Completion of IP 50090 satisfies the requirements for safety-related pipe support, such as hangers, snubbers, and restraints.

d. For clarification, "Material Test Report" is a generic expression meaning a report of test results to confirm that material, chemical and physical properties are consistent

with specifications. Vendor terms used, which can be identified with the expression, "Material Test Report," are:

- Ladle analysis (sample of molten metal)
- Check analysis (sample of solidified metal)
- CTR (Chemical Test Report or Certified Test Report)
- MTR (Material Test Report - usually includes chemical and physical tests)

e. The generic terms CTR and MTR should not be confused with the term, "Certification." A Certification is a document (in lieu of original quality documentation records) stating that the quality requirements contained in the specification and purchase orders, have been met.

f. "Quality Release Form" and "Certificate of Equipment," are examples of generic designations for forms which are used by NSSS manufacturers to serve as certifications of quality (in lieu of original quality documentation) for components and equipment manufactured by, or for, the NSSS manufacturer.

g. This procedure pertains to records of all safety-related piping activities at the site except welding and NDE; i.e., records of receipt, receipt inspection, identification, protection, testing, and inspection.

h. The inspector should bear in mind that the NRC's sample covers only a very small portion of the records involved. Thus, substantive errors or departure from requirements raise the issue of whether the licensee is adequately controlling the process.

03.01 Specific Guidance Note: The numbering of the guidance below refers to specific subsections of 02 above.

02.01a Compare the material test report/certification values with the specified requirements (ASME - B&PV Section III, for example) and applicable ASTM specifications. For materials requiring impact testing, compare the test values against the Code requirements and determine that test were performed at acceptable temperatures.

02.02 Particular attention should be directed towards determining the general time-frame in which nonconformances/deviations are dispositioned. Experience has shown that excessively long periods for resolution generally raises concern (with the NRC) about timely reporting of significant deficiencies and deviations. Additionally, record systems that are not kept current with respect to the documentation of nonconformances and their resolution generally lead to concerns about the corrective measures taken to resolve them, especially if work has progressed to a point where correction cannot be verified.

02.03 Experience indicates that under certain conditions, where there is a known shortage of craft workers, there has been a tendency for licensees and contractors not to verify or check qualifications in sufficient depth. The inspector should be watchful for these conditions and adjust the inspection coverage and depth accordingly.

49065-04 REFERENCES

SAR, Chapters 1, 3, 5, 7 and 17, including pertinent codes and standards referenced in these chapters.

Regulatory Guide 1.26, Quality Group Classification

Regulatory Guide 1.28, Quality Assurance Program Requirements (Design and Construction)

Regulatory Guide 1.38, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants

Regulatory Guide 1.88, Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records.

Regulatory Guide 1.116, Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems.

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