

NRC INSPECTION MANUAL

DRP

INSPECTION PROCEDURE 50055

REACTOR VESSEL AND INTERNALS RECORD REVIEW

PROGRAM APPLICABILITY: 2512

50055-01 INSPECTION OBJECTIVES

- 01.01 By a sample review of reactor vessel and internals records, determine whether
- the licensee system for preparing, reviewing, and maintaining records is functioning properly;
 - the selected records reflect work accomplishment consistent with NRC requirements and SAR commitments; and
 - the records indicate any potentially generic problems, management control inadequacies, or other weaknesses that could have safety significance.

Inspection Schedule

<u>Inspection</u>	<u>May Be Started</u>	<u>Must Be Started</u>	<u>Must Be Completed</u>
Reactor Vessel	-----	Installation complete	Installation complete plus two months
Internals	-----	Installation plus one month	Installation plus two months

50055-02 INSPECTION REQUIREMENTS

02.01 Review licensee/contractor requirements covering the span of records for reactor vessel and internals installation. Determine who prepares each record and, importantly, who is required to review the records for accuracy and for assuring that the recorded information meets requirements.

02.02 To determine whether the licensee/contractor system for documenting safety-related work is functioning properly, review a sample of records in the following areas:

- Receipt Inspection and Material Certification

1. Records confirm that required material characteristics performance tests, non destructive tests, environmental qualification tests, and other specification requirements are met.
 2. Original records or certification system met requirements of applicable criteria.
- b. Storage and Installation Inspections
1. Records confirm that stored equipment inspections were made at the required frequency.
 2. Records confirm that specified components were installed as specified.
 3. Records confirm that the required inspections were performed.
 4. Records confirm that required protection was provided after installation.
- c. Nonconformance/Deviation Records
1. Records include current status of these items (review about 10 nonconformance reports to ascertain adequacy).
 2. Records are legible, complete, reviewed by QC personnel, and readily retrievable.
 3. Nonconformance reports include status of corrective action or resolution.
- d. Qualification Records of Craft, QA and Inspection (QC) Personnel
1. Records are complete and current.
 2. Records establish that personnel are adequately qualified for their assigned duties and responsibilities.
- e. QA Audits
1. Records establish that the required audits were performed.
 2. Deficiencies identified during audits were corrected. Corrective action was such that repetition of the deficiency, or similar deficiencies, would be precluded.

50055-03 INSPECTION GUIDANCE

03.01 Applicable portions of the SAR should be reviewed to determine licensee commitments relative to documentation requirements for reactor vessel and internals storage, handling, installation and post-installation cleanliness preservation prior to reviewing records in this area. The inspector should make this determination during inspection preparation.

03.02 Usually, several organizations at the construction site are involved with safety-related activities associated with the reactor vessel and internals. Some organizations may perform only one activity (for example vessel placement). The pertinent records of all organizations involved should be reviewed.

03.03 Specific Guidance

Note: The guidance below refers to specific subsections of 02, above.

02.02a. Determine, among other aspects of receipt inspection, whether material and fabrication certifications met applicable requirements.

02.02b. A review of more than 50% of the inspection records may be required to ascertain whether the vessel and internals were installed in accordance with specifications and work procedures.

The records should confirm that only authorized personnel, tools and equipment were allowed in the vessel or "clean area" as specified in established procedures.

Note: 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 departures from requirements identified in NRC's sample raises the issue of whether the licensee is adequately controlling the process.

50055-04 REFERENCES

SAR, Chapters 1, 3, 4, 5 and 17, including pertinent codes and standards referenced in these chapters

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

Regulatory Guide 1.39, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants"

Regulatory Guide 1.65, "Materials and Inspections for Reactor Vessel Closure Studs"

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

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