INSPECTION PROCEDURE 35065

PROCUREMENT, RECEIVING, AND STORAGE

PROGRAM APPLICABILITY: 2512

35065-01 INSPECTION OBJECTIVES

To determine whether equipment procurement specifications include applicable quality assurance (QA) and technical requirements identified in the safety analysis report (SAR) and whether receipt inspection and storage activities are conducted in compliance with QA program requirements.

Inspection Schedule

Inspection	May Be Started	Must Be Started	Must Be Completed
Initial		12 months after CP issuance	
Subsequent		Every 24 months thereafter	

35065-02 INSPECTION REQUIREMENTS

02.01 Site Procurement. Review procurement conducted at the construction site.

a. Licensee Activities

1. Ascertain if the licensee has identified each site contractor who prepares and/or issues procurement documents.

2. Review one record for adequacy relating to licensee's overview (surveillance, reviews, audits, etc.) of each contractor's (onsite and offsite) procurement activities.

b. Site Procurement Activities and Records. Review a representative number of procurement specifications.

1. Determine whether the specified design parameters are in accordance with those listed in the SAR or other architect-engineer (AE) licensee specifications applicable to the preparation of site procurement documents.

2. Determine whether procurement specifications identify the applicable technical requirements (i.e., applicable codes and standards).

3. Determine whether purchasing documents impose the requirements of 10 CFR 21 when "basic components" are purchased. (Basic components are discussed in NUREG 0302.)

4. Ascertain whether the supplier is on the approved list of suppliers.

5. Determine whether vendors' quality assurance (QA) programs have been audited by the purchaser organization.

6. Confirm whether procurement specifications identify appropriate QA requirements including requirements to protect the item against environmental conditions for periods of long-term storage (i.e., hot and humid, subject to ocean atmosphere, cold and damp, etc.).

7. Review requirements specified in the procurement document for documentation and acceptance of the item. Where a certificate of conformance (COC) is to be used for acceptance in lieu of some or all final conformance records, examine specifications for the COC document to determine whether the following information is required to be included in the COC:

   (a) Identifies the purchased material or item (reference to PO or procurement document is acceptable).

   (b) Identifies specific requirements met (via list or reference to procurement document).

   (c) Identifies procurement requirements not met, if any.

   (d) Signed by an appropriate member of supplier's QA function.

   (e) Identifies procedures or QA program to be followed for filling out, review and approval of certificates.

   (f) Receiving inspection has the means to determine that purchaser/agent has verified by audit (or source verification) the validity/effectiveness of the supplier's COC system.

8. When required (e.g., for complex engineered components) in addition to the COC, determine whether any source verification relative to acceptance of the item is specified.

9. Examine the adequacy of implementation for the protection, handling, control of procurement specifications and purchasing documents.

10. Verify inclusion of requirements for environmental qualification of equipment, components and replacement parts, and seismic qualification of such material not requiring environmental qualification.

11. Verify requirements for approval of supplier special processes such as welding, nondestructive examination (NDE), heat treatment, coating, and plating, including post-plating processes to prevent hydrogen embrittlement.

02.02 Receiving Inspection

a. Examine the system established for conducting receiving inspection including:

   1. Facilities.

   2. Staff.

   3. Tools and equipment.

   4. Records-procurement documents, records of acceptance (i.e., COC, material certifications, results of inspection of suppliers, etc.).

   5. QA/QC (quality control) receiving procedure.

b. Determine whether receiving inspection records are available and whether identified discrepancies are reviewed by QA and/or engineering, as appropriate, to assure proper disposition.

c. Examine material receiving inspection records and determine compliance with acceptance requirements.

d. Review requirements specified in the procurement document for documentation and acceptance of the item. Ascertain whether receiving inspection is to be based on one or more of the following:

   1. An acceptable certificate of conformance.

   2. Supplier-forwarded documentation (inspection, test, material, etc.) required via procurement document.

   3. Direct examination (of items or sample thereof) to verify that specified "design/physical" acceptance requirements are met (i.e., other than review of supplier documentation or a check for damage).

   4. Receiving inspection based on record of source verification resulting in acceptance, or conditional acceptance, of the item(s).

e. Ascertain the adequacy of procurement document requirements for acceptance of the item by receiving inspection. (Factors such as safety significance and whether the procurement relates to an engineered item or one of standard design (off the shelf) should be considered.)

f. Determine adequacy of certificate of conformance documentation. If procurement documents selected in Item 02.02d above do not require a COC from the supplier, go to COC file and select several at random and ascertain the following:

   1. Identifies the purchased material or item (reference to PO or procurement document, if on hand, is acceptable.)

   2. Identifies specified requirements met (via list or reference to procurement document).

   3. Identifies procurements not met, if any.

   4. Signed by an appropriate member of supplier's QA qualification.

5. Identifies procedures or QA program to be followed for filling out review and approval of COCs.

6. Receiving inspection has the means to determine that purchaser/agent has verified by audit (or source verification) the validity/effectiveness of the supplier's COC system.

g. When source verification is specified for acceptance of an item in addition to a COC, determine whether the appropriate receiving inspection organization is aware of the source verification results.

h. Independent-Verification

1. For each of the listed items, determine through a review of related documentation, whether the specific procurement requirements, such as codes, standards, and other specifications, are met for the purchased material or equipment. Also, verify by inspection of a representative sample of the purchased item and pertinent vendor documentation, that selected material and physical requirements in the procurement document were met.

1 NSSS electrical panel/component
1 NSSS mechanical component
1 NON-NSSS electrical component or panel
1 ea NON-NSSS pump, valve, heat exchanger, pipe fitting
1 NON-NSSS structural steel procurement
1 NON-NSSS welding consumable procurement
1 NON-NSSS cable procurement

2. Verify that other documentation (e.g., test, material and inspection data) presented with certificates of compliance is reviewed by technical personnel who are capable (through experience, education, or training) to assure that components meet all specified safety-related requirements. Verify (on a sampling basis) that other vendor documentation (material, test, inspection, etc.) includes required data.

3. In cases where the receiving inspection function (or the NRC inspection) has identified a nonconformance which relates to a deviation from specified requirements not previously identified on the COC or other vendor-supplied documentation, determine whether corrective action proposed includes a need to reaudit the vendor's system for preparation and issuance of a COC. Also, determine whether the "deviation" is subject to a 10 CFR Part 21 evaluation.

i. Based on selective sampling, determine whether nonconforming items are properly tagged and segregated.

02.03 Storage

a. Review work and QA/QC procedures established to conduct activities of storage for safety-related items in Class A, B, C, and D levels of storage. Refer to ANSI Standard N45.2.2, Sections 2.7 and 6.1.2. Determine whether these procedures are adequate.

b. Inspect facilities used or available for onsite or nearby storage of Class A, B, C, and D items. Determine whether:

1. Storage facilities for storage of Class A equipment has an environmentally controlled atmosphere and provisions to prevent animals (especially rodents) and birds from entering.

2. Facilities or other requirements for Class B, C, and D equipment storage are satisfied.

3. Protection from damage during storage is adequate.

4. Testing equipment is available and suitable for intended use.

5. Periodic inspection of storage facilities is made.

6. Records of storage conditions are being maintained as specified and are current.

c. Select typical items subject to Class A, B, C, and D levels of storage. Determine adequacy of storage relative to:

1. Storage conditions (environment).

2. Control of access to storage area.

3. Identification of stored items.

4. Control of items prior to use.

5. Satisfaction of special storage requirements; e.g., specified by engineering or the supplier.

6. Determine that storage requirements such as lubrication, periodic rotation, nitrogen blankets, desiccants; etc., are satisfied.

d. Selectively review equipment storage records and determine whether:

1. Site (or project) storage documents identify type of storage and inspections required for each type of equipment.

2. Records reflect licensee inspection of storage facilities and storage activities.

3. Records reflect that specified storage conditions are met.

02.04 Inplace Storage

a. Review work and QA/QC procedures established to conduct activities for those items of equipment such as heat exchangers, large motors, diesel generators, large pumps, etc.; that are stored in place.

b. Determine that equipment stored in place is protected from construction debris and damage.

c. Determine that requirements for storage in place such as lubrication, periodic rotation, nitrogen blankets, desiccants, heaters, etc.; are satisfied.

d. Determine that periodic inspection of items in storage is implemented and records are maintained.

e. Determine that any special storage requirements specified by the engineer or the supplier are satisfied.

02.05 Inplant Storage

a. When inplant storage is utilized for valves and other items not being actually stored inplace, verify that the applicable storage requirements are being met.

b. Verify the acceptability of storage conditions for such items.

35065-03 INSPECTION GUIDANCE

General Guidance

a. This inspection procedure is scheduled for implementation approximately 12 months after construction permit (CP) issuance and again after another 24 months.

b. The primary purpose of this inspection procedure (IP) is to determine whether the "system" for procurement, receiving, inspection, and storage activities is adequate and is effectively implemented.

c. Applicable portions of the SAR should be reviewed to determine licensee commitments relative to procurement, receiving, and storage prior to inspection in this area. The inspector should make this determination during inspection preparation. For example, prior to inspecting materials and components in storage, determine the requirements for such things as:

1. Storage.

2. Protection from damage.

3. Special preservation requirements.

4. Material and component identification.

5. Segregation of nonconforming items and required records.

03.01 Specific Guidance

NOTE: The guidance below refers to specific subsections of Section 02 above.

02.01 The inspection should include all contractors who have any procurement, receiving, storage and record keeping responsibilities. Examine the project organizations and identify all contractors, their duties and responsibilities.

02.01a This can be accomplished through a review of licensee audit reports on each contractor having site procurement, receiving and inspection responsibilities, and a detailed examination of one or more of such records.

02.01b The inspector should select and review more than one procurement specification from each organization preparing procurement documents.

02.01b8 Refer to RG 1.123/ANSI N45.2.13, Section 10.3.1.

Ascertain whether approved bidders list is readily available and that the procurement selected for inspection is supplied by a listed vendor. The

approved list should identify the type components or material the vendor is qualified to supply.

02.02a In addition to a general review of facilities, staff, records and procedures, if possible, observe a receiving inspector performing a receipt inspection, and determine whether the following aspects are adequate.

1. Inspection facilities such as proper tools and handling are available.

2. Staff is adequate and properly trained in receipt inspection.

3. Proper tools are dedicated for inspection purposes.

4. Review the documented records, such as procurement specifications, purchase order, COC, material certifications; etc., available to the receiving inspector to assist him in his inspection.

5. Observe if the inspector follows a QA/QC receiving procedure or uses a check form

02.02c Compare design parameters in the procurement specification with receipt inspection documentation.

As appropriate, by observation and/or examination, determine whether received components and materials meet design requirements.

02.02i Review the nonconformance file. Select an appropriate sample and inspect storage areas to determine whether nonconforming equipment is properly tagged, segregated and precautions are taken to prevent its release for installations or use.

03.02 See guidance referenced below for storage of items.

35065-03 REFERENCES

Most of the chapters in the facility SAR, including pertinent codes and standards referenced in these chapters.

NUREG-0302, Rev. 1 (10 CFR 21 Remarks and Discussion) - especially staff positions relative to paragraphs 21.3(d), 21.31, and 21.51.

Regulatory Guide 1.123, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."

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."

ANSI - N45.2 - Quality Assurance Program for Nuclear Facilities.

ANSI - N45.2.13 - Quality Assurance Requirements for Control of Procurement of items and Services for Nuclear Power Plants.

ANSI - N45.2.2 - Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants.

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