SECTION I

INSPECTION OBJECTIVE

Ascertain whether the licensee has developed and implemented a QA Program relating to the control of receipt, storage and handling of equipment and materials that is in conformance with Regulatory requirements, commitments in the application and industry guides and standards.

SECTION II

INSPECTION REQUIREMENTS

1. Program Review

a. Verify that establishment of the following administrative controls for receipt of safety-related items are in accordance with FSAR commitments:

(1) Written requirements for conducting receipt inspections of all incoming safety-related materials and supplies. The requirements should identify those vendors who are allowed to supply material which is supported by "quality certification" only.

(2) Requirements for receipt inspection for shipping damage.

(3) Requirement that materials and supplies will be examined for conformance with requirements specified on original procurement document.

(4) Requirement that documentation of the receipt inspection be prepared and retained.

(5) Responsibilities are assigned in writing for items (1)-(4) above.

b. Verify establishment of the following administrative controls for the disposition of items received on site:

(1) Controls for Acceptable items including:

(a) Tagging/marking for storage.

(b) Immediate issue for use.

(2) Controls for Nonconforming items including:

(a) Requirements have been established for marking and segregating nonconforming items.

(b) Requirements have been established for the disposition of nonconforming items.

(c) Requirements have been established to prohibit the use of equipment or materials in "nonconformance" status.

(d) Provisions have been made for notifying affected organizations of nonconforming items.

(e) Requirements have been established for the documentation of nonconforming items.

(f) Requirements have been established for transmitting to the licensees audit group for supplier evaluation documentation concerning nonconforming items as described in Item (e) above.

(3) Controls for Conditional Release items including:

(a) Justification for use

(b) Documentation required

(c) Authority for conditional release of item

(4) Responsibilities are assigned in writing for items (1) - (3), above.

c. Verify the establishment of the following administrative controls for (on or offsite) storage of safety-related items:

(1) Written requirements have been issued providing for

levels of storage and appropriate environmental conditions.

(2) Storage controls including access, identification of items, coverings, and preservatives are specified.

(3) Requirement to conduct periodic inspections of the storage area.

(4) Maintenace and care of items in storage is specified insluding shelf life.

(5) Responsibilities assigned for implementation of storage controls identified in (1) - (4), above.

d. Verify the establishment of the following controls for handling a safety-related material:

(1) Routine and special handling measures are specified.

(2) Hoisting equipment controls are established.

(3) Responsibilities assigned to assure that the handling controls identified in items (1) and (2), above will be implemented.

2. Implementation

*a. Select a sample of 6 recently purchased safety- related items that have been received on-site. No more than two should be from any one of the following categories: mechanical, electrical, instrument/ electronic, and consumables (chemicals, reagents, lubricants, filters, etc.). Verify the following:

(1) Receipt inspections were conducted in accordance with administrative controls identified in 1.a.

(2) Disposition of the items was in accordance with controls identified in 1.b.

(3) Storage of the items was in accordance with 1.c.

*b. Select 3 safety-related items stored in the warehouse. Verify that tagging/marking allows tracing the item back to purchase documents, receipt documents, and quality certification documents.

*c. If any safety-related items have been received and stored offsite, e.g., in some nearby warehouse, verify by a spot check of two items, that they are being subjected to the same receipt inspection requirements as would be required if they were received onsite.

*d. Tour the onsite warehouse. Verify appropriate cleanliness and environmental controls are main-

tained in accordance with administrative controls identified in 1.c.

*e. Visit an on or offsite plant storage area and select two-three safety related items currently in storage that have been identified by receiving personnel to be in nonconformance with specified requirements. Verify that the administrative control identified under 1.b(2) are being implemented.

SECTION III

INSPECTION GUIDANCE

References: ANSI N45.2.2-1972; ANSI N45.2.13-1976; Chapter 17 of the FSAR; Appendix B to 10 CFR 50 - Criteria VII, VIII, XIII, XV, XVI.

1. Program Review

ANSI N45.2.2 provides extensive guidance concerning all phases of this procedure.

1.a. Section 5 of ANSI N45.2.2 provides guidance.

Receipt Inspections are inspections by the purchaser at some location outside the supplier's permises to determine the conformance of materials and supplies to predetermined quality requirements. Items normally considered during receipt inspection may include cleanliness, dimensional, chemical and physical tests

and functional tests, depending upon the extent of source surveillance and inspections performed.

It should be noted that all safety related materials and supplies are not necessarily received and stored onsite. Rather, they may be received and stored in warehouse, etc., near the site. You should, therefore, assure yourself that the licensee's receipt inspection program covers offsite as well as onsite deliveries of safety related material and supplies.

You should expect to find written receipt inspection requirements which specifically address those materials, components, and spare parts associated with safety related items, e.g., the reactor coolant pressure boundary. In that it is quite likely items of this nature such as resins, boron, spare parts, etc., are being received at this time, it is appropriate to verify that the formal receipt inspection program applicable to these items is being followed by receipt inspectors.

1.a.(1) In regard to quality certification (10 CFR 50, Appendix B, Criterion VII), when quality documentation in the form of certification is used at the site in lieu of original records establishing quality of materials or components important to safety, the following guidelines should be used:

- The certification should specifically identify the purchased material or equipment, such as by the purchase order number.

- The certification should identify the specific procurement requirements met by the purchased material or equipment, such as codes, standards, and other specifications. This may be accomplished by including a list of the specific requirements or by providing, onsite, a copy of the purchase order and procurement specifications or drawings, together with a suitable conformance statement. The procurement requirements identified shouldinclude any approved changes, waivers, or deviations applicable to the subject material or equipment.

- The certification should identify any procurement requirements which have not been met, together with an explanation and the means used to resolve the nonconformances.

- The certification should be attested to by a person who is responsible for this QA function and whose function and position are described in the purchaser's or supplier's QA program.

- The certification system, including the procedures to be followed in filling out a certificate and the administrative procedures for review and approval of the certificates, should be described in the Purchaser's or supplier's QA program.

- Means should be provided by the Licensee to verify the validity of certificates, and to determine the effectiveness of the certification system when desired, such as during the performance of audits.

Typical certifications are manufacturer's certifications that a product (usually consumables, such as weld rod and fly ash), if tested, would exhibit the product characteristics shown on the certification document. Typical certifications are acceptable only if the using-agency can demonstrate that the product was manufactured under a process control system which provides for product control and process records which can establish that the product was manufactured within the characteristic limits identified on the typical certification.

1.a.(4) The licensee should have a formal recordkeeping system for receipt inspection and testing of safety related equipment in order to substantiate that such activities were, indeed, performed and the results documented.

1.b. Three levels of dispostion exist, as described in ANSI N45.2.2: Acceptable, Nonconforming, and Conditional Release. Procedures should prevent use of non-conforming items. Items must not be placed in a "conditional release" status without documentation stating authority and justification for the conditional release.

1.b.(2) Section 17.2.15 of the standard FSAR normally would describe the measures to control nonconforming equipment and materials to prevent their

inadvertent use or installation. Section 5 of ANSI N45.2.2 provides guidance in this area.

Regarding nonconforming items, you should keep in mind that the lack of equipment or material documentation required by codes, standards, license commitments or procurement specifications is an item of nonconformance with Regulatory requirements.

1.b.(2)(b) In your review of the requirements established for the disposition of safety related nonconforming items you should expect to find provisions to assure that: (1) nonconforming items will be reviewed and then accepted, rejected, repaired or reworked in accordance with

documented procedures; (2) repaired and reworked items will be reinspected in accordance with applicable procedures; (3) a description of the change, waiver, or deviation that has been accepted for "use as is" items will be documented; and (4) the responsibility and authority for the disposition of nonconforming items will be clearly defined in writing.

1.b.(2)(c) It is extremely important that nonconforming safety related items are properly controlled to prevent their inadvertent use or installation. Refer to Section 5 of ANSI N45.2.2 for specific guidance on the receipt of nonconforming materials and equipment.

1.c. Special storage environments include such things as inert gas atmosphere, specific moisture content levels, temperature levels, etc. In your review of environmental controls, make sure the licensee has established a requirement for periodically inspecting items stored in special environments to assure that the controlled conditions will be maintained.

1.d. Section 7 of ANSI N45.2.2 provide specific guidance on handling of materials and equipment.

Special handling is sometimes required because of the weight, size, susceptibility to shock damage,

etc., of certain items. The licensee should therefore, have controls established which provide for special handling as well as for the routine handling of materials and equipment.

Note: 1. Only single * requirements need be inspected when the reactor facility for which the application is being made for an operating license is located at the same site and will use the same site management that was inspected within the previous 24 months.

2. The program review function should be completed during the operational preparedness phase of MC 2513.

3. A Receipt, Storage and Handling of Equipment and Materials Program for plant operations is not required until the facility license is issued. Therefore,

inspection of program implementation may be deferred if necessary but should be completed within the first six-month period of operation.

4. For record keeping purposes, the program review and program implementation phases of the inspection will be assigned 50% of the total inspection effort.