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Procurement

Activity Procurement Document Control

1.0 Purpose To determine that procurement document control is adequate and complies with applicable codes, standards, and regulations.

2.0 Scope This guideline has been developed for use in evaluation of procurement document control by ensuring that adequate quality is included or referenced in documents for procurement of items and services.

References

1. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."
2. ANSI N45.2.9, "Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants."
3. ANSI N45.2.13, "Quality Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Ensure that the following elements are addressed by the procedures for preparation of documents for procurement of items and services:

- A. Applicable regulatory requirements, design bases, and other requirements necessary to ensure adequate quality are included or referenced by procurement documents.
- B. Changes in procurement documents are subject to the same degree of control as was utilized in the preparation of the original document.
- C. To the extent necessary, procurement documents require contractors to provide a quality assurance program consistent with the pertinent requirements of ANSI N45.2.

3.3 Select a sample of procurement documents and verify that they contain the following provisions:

- A. Statement of the scope of the work to be performed by the supplier.
- B. Supplier quality assurance program, including identification of quality assurance requirements and the elements of the program applicable to the items or services procured.
- C. Requirements for the supplier to supply appropriate documentation of quality, including component traceability.
- D. Basic technical requirements, such as reference to drawings, specifications, codes, standards, regulations, procedures, or instructions, including revision data.
- E. Identification of test, inspection, and acceptance requirements of the purchaser for monitoring and evaluating the supplier's performance.
- F. Source inspection and audit, including provisions for access to plant facilities and records when the need has been determined.
- G. Documentation requirements including records to be prepared, maintained, submitted or made available for review, and instructions on record retention and disposition.
- H. Retention times and disposition requirements when requirements for maintaining specific quality assurance records are specified.
- I. Provisions for extending applicable requirements of procurement documents to lower tier subcontractors and suppliers, including purchaser's access to facilities and records.
- J. Requirements for reporting and approving disposition of nonconformances.
- K. Identification of spare and replacement parts of assemblies and the appropriate delineation of the technical and quality assurance related data required for ordering these parts or assemblies.
- L. Provisions for 10 CFR 21 applicability.

3.4 Select a sample of procurement documents and verify that the following activities were performed:

- A. A review was performed by the quality organization and the review was documented prior to transmittal to suppliers.
- B. The review included the requirements specified in paragraph 3.3 of this guideline.
- C. The review included an analysis of exceptions or changes requested or specified by the supplier, and determination of the effects such changes may have on the intent of the procurement documents or quality of the item or service to be furnished.
- D. Procurement document reviews are performed by personnel who have access

to pertinent information and who have adequate understanding of requirements and intent of procurement documents.

3.5 Verify that distribution lists for procurement documents are established, current, and updated.

3.6 Verify establishment of control and distribution of vendor technical manuals and QA manuals.

4.0 Other Guidelines for Consideration

4.1 See Chapter 1, "General Quality Surveillance Guidance."

4.2 See Chapter 13, "Nonconformances."

Activity Handling

- 1.0 Purpose* To determine that material handling is adequate and complies with applicable codes, standards, and regulations.
- 2.0 Scope* This guideline has been developed for use in evaluation of the material handling system by ensuring preservation of the quality of safety-related items and containers.

References

1. NRC Inspection Manual, Procedure 38702.
2. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Verify the existence of adequate procedures for the following aspects of handling safety-related material:

- A. Routine and special handling measures.
- B. Hoisting equipment controls.
- C. Equipment and rigging inspection, including measures for indicating the acceptability of equipment after the inspection.
- D. Adequate control of nonconforming lifting equipment to prevent its use.
- E. Competence criteria (i.e., qualification/certification) for personnel who use material handling equipment.

3.3 Select activities involving handling of safety-related material for verification of the following items:

- A. Hoisting equipment used for handling is certified by the manufacturer and the certification indicates the parameters for the maximum load to be handled.
- B. Periodic inspections of material handling equipment are documented.

C. Special handling instructions, if any, are on file.

D. Documentation to demonstrate qualifications of forklift and hoist operators is on file.

4.0 Other Guidelines for Consideration

4.1 See Chapter 1, "General Quality Surveillance Guidance."

Activity Receipt of Material

1.0 Purpose To determine that receipt inspection is adequate and complies with applicable codes, standards, and regulations.

2.0 Scope This guideline has been developed for use in evaluation of the receiving of safety-related items. Receiving starts when items arrive at a storage facility or plant site before unloading or unpacking.

References

1. NRC Inspection Manual, Procedure 38702.
2. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."
3. ANSI N45.2.13, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Verify the existence of adequate procedures for the following aspects of receipt inspection:

- A. Receipt inspection of all incoming safety-related materials and supplies.
- B. Receipt inspection of material for damage which may have occurred during shipping.
- C. Examination of materials and supplies for conformance with requirements specified on original procurement documents.
- D. Preparation and retention of documentation of receipt inspection.

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

- A. Controls for acceptable items, including:
 1. Tagging/marking for storage.

2. Immediate issue for use.
- B. Controls for nonconforming items, including:
 1. Marking and segregating nonconforming items.
 2. Disposition of nonconformances.
 3. Prohibiting the use of nonconforming equipment and materials.
 4. Notifying affected organizations of nonconforming items.
 5. Documentation requirements.
 6. Transmitting documentation concerning nonconforming items to the group responsible for supplier evaluation.
- C. Controls for conditional release items, including
 1. Justification of use.
 2. Documentation required.
 3. Authority for conditional release of item.
 4. Clearance prior to declaration of operability.
- 3.4 Verify that preliminary visual inspections are performed prior to or immediately after unloading material to determine if damage occurred during shipping. Verify that these inspections include observations for the following types of damage:
 - A. Fire.
 - B. Excessive exposure.
 - C. Environmental damage.
 - D. Tie-down failure.
 - E. Rough handling.
 - F. Review of impact recording instrument readings.
- 3.5 Verify that a formal record keeping system exists for receipt inspection and testing of safety-related equipment in order to substantiate that such activities were performed and the results documented.
- 3.6 Select a sample of safety-related items which have been receipt inspected. Check that the following activities were performed:
 - A. Receipt inspection was performed in an area equivalent to the level of storage requirement for the item.
 - B. Verification that identification and markings are in accordance with applicable codes, specifications purchase order, and drawings.

- C. Review of manufacturing documentation to ensure that the item received was fabricated, tested, and inspected prior to shipment in accordance with applicable codes, specifications, purchase orders, and drawings.
 - D. Visual inspection of the item to ensure that covers and seals meet their intended function.
 - E. Verification that coatings and preservatives are applied in accordance with specifications, purchase orders, and/or manufacturer's instructions.
 - F. Verification that inert gas blanket pressure is within acceptable limits.
 - G. Verification that desiccant is not saturated by examination of humidity indicators.
 - H. Visual inspection of the item for physical damage.
 - I. Visual inspection to ensure that accessible internal areas are free of dirt, soil, mill scale, weld splatter, oil, grease, or stains.
 - J. Inspection to ensure that physical properties conform to specified requirements and that chemical and physical test reports, if required, meet the requirements.
 - K. Random visual inspection to ensure that important dimensions conform with drawings and specifications.
 - L. Verification that weld preparations are in accordance with applicable drawings and specifications.
 - M. Visual inspection of accessible areas to ensure that the workmanship is satisfactory to meet the intent of the requirements.
 - N. Verification of the presence of proper lubricants and oils, if required by specification, purchase order, or manufacturer's instructions.
 - O. Verification that insulation resistance tests for motors, generators, and control and power cable are performed to ensure conformance with specifications.
 - P. Verification of shelf life data, as required.
- 3.7 Where receiving inspection, in addition to that described in paragraph 3.5, is required, verify that the special inspection procedure is attached to the item or container and that the special inspection is performed and results are documented.
- 3.8 Select a sample of nonconforming items and verify the following:
- A. Items are reviewed and then accepted, rejected, repaired, or reworked in accordance with documented procedures.
 - B. Items that are repaired and reworked are reinspected in accordance with applicable procedures.
 - C. A description of the change, waiver, or deviation that has been accepted for use-as-is items is documented.

- D. The responsibility and authority for disposition of nonconforming items is clearly defined in writing.
 - E. For items that are dispositioned repair or use-as-is, verify that the appropriate design change documentation has been initiated where required.
 - F. Items are controlled to prevent inadvertent use or installation.
- 3.9 For items placed in a "conditional release" status, verify that a statement documenting the authority, technical justification for the conditional release of items, and limits of test use or operability for installation is prepared and made a part of the documentation.

4.0 Other Guidelines for Consideration

- 4.1 See Chapter 1, "General Quality Surveillance Guidance."
- 4.2 See Chapter 13, "Nonconformances."
- 4.3 See Chapter 17, "Dedication."
- 4.4 See Chapter 17, "Shipping."

Activity Shipping

1.0 Purpose To determine that the material shipping program is adequate and complies with applicable codes, standards, and regulations.

2.0 Scope This guideline has been developed for use in evaluation of the material shipping program by ensuring preservation of the quality of safety-related items and containers.

References

1. NRC Inspection Manual, Procedure 38702.
2. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observation of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Verify that the following elements are addressed by the procedures for shipping of safety-related material:

- A. Routine and special handling of materials and equipment.
- B. Description of the four levels of protective measures necessary to prevent damage, deterioration, or contamination of items.
- C. Guidelines to categorize items according to level of packaging required.
- D. Transportation requirements for
 1. Shipment on open carriers where items may be exposed to adverse environmental conditions.
 2. Shipment on closed carriers.
 3. Shipment of items that exceed established weight or size limitations for railroads or highways, or require special handling.
- E. Precautions to be taken in the areas of loading, rigging, handling, package and preservative coatings, sealed openings, stacking, theft, and vandalism.

- F. Identification and markings.
 - G. Shipments from countries outside the United States.
 - H. Shipment of special nuclear material and sources.
- 3.3 Select activities involving shipping of safety-related material for verification of the following items:
- A. Procurement documents specify the level of protective measures required.
 - B. Items are packaged according to the level specified in the procurement documents.
 - C. The mode of transportation used is consistent with the item's protection classification.
 - D. For items that exceed established weight or size limitation or require special handling, procurement documents specify additional considerations.
 - E. Handling precautions are observed, including utilization of specified lifting points and handling of austenitic stainless steel and nickel-base alloy materials so that they avoid contact with lead, zinc, copper, mercury, and other low-melting elements, alloys, or halogenated material.
 - F. Packages, preservatives, and coatings are visually inspected after loading, and damaged areas are repaired prior to shipping.
 - G. Sealed openings are inspected after loading to ensure closures are intact.
 - H. When required, special instructions for stacking are specified and marked on the container.
 - I. Precautions to minimize the possibility of theft and vandalism are taken.
 - J. Identification and markings on the outside of all packages shall be maintained.
 - K. Special nuclear material and sources are shipped as specified in the NRC fuel license.
 - L. Special instructions are followed with regard to inert gas blankets.

4.0 Other Guidelines for Consideration

- 4.1 See Chapter 1, "General Quality Surveillance Guidance."
- 4.2 See Chapter 17, "Handling."
- 4.3 See Chapter 17, "Storage."

Activity Spare Parts

- 1.0 Purpose* To determine that procurement and control of spare and replacement parts are adequate and comply with applicable codes, standards, and regulations.
- 2.0 Scope* This guideline has been developed for use in evaluation of spare and replacement part procurement by ensuring that adequate controls are included in the process.

References

1. NRC Inspection Manual, Procedures 38702 and 38703.
2. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."
3. ANSI N45.2.13, "Quality Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Ensure that the following elements are addressed by the procedures for procurement and control of spare and replacement parts:

- A. Replacement parts are purchased to specifications equivalent to those specified for the original equipment, or those specified by a properly reviewed and approved revision.
- B. Procurement of spare and replacement parts for original items found to be commercially off the shelf, or without specifically identified quality assurance requirements.
- C. Procurement of spare and replacement parts for those original items where the quality assurance requirements cannot be determined.
- D. Replacements are produced or fabricated under requirements at least equivalent to that of the original equipment, or those specified by a properly reviewed and approved revision.
- E. Mechanism for determining that an item is suitable for its intended application and that each determination is controlled and performed consistently.

- F. Source evaluation and selection.
 - G. Objective evidence of quality furnished by the contractors.
 - H. Inspection and audit at the source.
 - I. Examination of items upon delivery.
 - J. Documentary evidence that items conform to procurement requirements is available at the nuclear facility site prior to installation.
 - K. Description of acceptance methods including source verification, receiving inspection, supplier certification of conformance, and post installation test.
 - L. Control of items which are repaired and returned to storage for future use.
- 3.3 Select a sample of spare and replacement parts from storage. Verify that the following items are correct:
- A. Material part number data originates from approved design disclosure documents, or that changes are cross-referenced to applicable documents.
 - B. Parts are purchased from qualified vendors.
 - C. "Quality" or "critical" characteristics, as appropriate, have been developed.
 - D. Shelf-life has been identified and verified to be within manufacturer's recommendations.
- 3.4 Select a sample of safety-related items which have been accepted using supplier certificates of conformance. Review the certificates of conformance to verify that the following elements are included:
- A. Identification of purchased material or equipment, e.g., as by purchase order number.
 - B. Specific procurement requirements met by the purchased material, e.g., codes, standards, and other specifications.
 - C. Any procurement requirements that have not been met, together with an explanation and means for resolving the nonconformance.
 - D. Signature of person responsible for the quality assurance function and whose function and position are as described in the supplier's quality assurance program.
 - E. Where component or material has been accepted based on certificate of compliance, review the effort to validate the vendor surveillance/audit.
- 3.5 Select a sample of items which have been accepted using source verification. Verify that the following activities were performed:
- A. Documentation was submitted as required and provides verification of approvals, applicable material inspections, and material tests.
 - B. Fabrication procedures and processes were approved and followed.

- C. Applicable inspection, test, and certifications were available.
 - D. Components and assemblies were inspected, examined, and tested as required, and applicable inspections, tests, and certification records were available.
 - E. Nonconformances were dispositioned as required.
 - F. Components and assemblies were cleaned, preserved, packed, and identified in accordance with specified requirements.
 - G. Documented evidence of acceptance by source verification was furnished to the receiving destination of the item, to the purchaser, and to the supplier.
- 3.6 Select a sample of items for which post-installation testing was used as a part of the acceptance process. Verify that the post-installation testing requirements specified in procurement documents were implemented.

4.0 Other Guidelines for Consideration

- 4.1 See Chapter 1, "General Quality Surveillance Guidance."
- 4.2 See Chapter 13, "Nonconformances."
- 4.3 See Chapter 17, "Receipt of Material."
- 4.4 See Chapter 17, "Dedication."

Activity Storage

1.0 Purpose To determine that material storage is adequate and complies with applicable codes, standards, and regulations.

2.0 Scope This guideline has been developed for use in evaluation of material storage and inventory control by ensuring minimization of the possibility of damage or lowering of quality due to corrosion, contamination, deterioration, or physical damage.

References

1. NRC Inspection Procedure, Procedure 38702.
2. ANSI N45.2.2, "Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants."
3. INPO Good Practice MA-311, "Material Storage Controls."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Verify the existence of adequate procedures for the following aspects of material storage:

- A. Storage levels and appropriate environmental conditions, including definitions of levels and methods of storage.
- B. Storage controls, including access, identification of items, coverings, and preservatives.
- C. Periodic inspections of storage areas.
- D. Cleanliness and housekeeping practices in storage areas.
- E. Fire protection commensurate with the type of storage area and material involved.
- F. Measures to prevent entrance of animals.

- G. Item storage requirements are based on vendor information, material specifications, standards, experience, plant environment, and the requirements are included in purchase documents.

3.3 Inspect storage areas to verify that the following measures have been implemented:

- A. Access to storage areas is controlled.
- B. Cleanliness and good housekeeping practices are enforced in the storage areas and areas are cleaned to avoid accumulation of trash, discarded packaging material, and other detrimental soil.
- C. Fire protection is provided and maintained.
- D. Food, drink, and salt tablet dispensers are not stored in controlled storage areas.
- E. Measures to prevent entrance of animals have been taken to minimize possible contamination and damage to stored material.
- F. Items are stored in a manner as to permit ready access for inspection or maintenance without excessive handling.
- G. Items are arranged so that racks, cribbing, or crates are bearing the full weight without distortion.
- H. Hazardous chemicals, paints, solvents, and other similar materials are stored in well-ventilated areas and not in close proximity to important nuclear plant items.
- I. The hazardous material program is in place and effective or incompatible chemical storage and inert atmosphere.
- J. Weatherproof coverings, when used for outdoor storage, are flame-resistant. They are placed so as to provide drainage and to ensure air circulation. They are tied down to prevent moisture from entering laps and to protect the coverings from wind damage.
- K. Space heaters enclosed in electrical items are energized.
- L. Performance of maintenance requirements specified by manufacturer's instructions. There should be provisions for a tickler system to ensure that storage instructions are accomplished, preventive maintenance and lubrication/fluid level tasks are completed, and perishable items are restocked before expiration of shelf-life.

3.4 Select a sample of items which have limited shelf-life or require special environmental controls. Verify that shelf-life has not expired, and that they are maintained according to associated storage records.

4.0 *Other Guidelines for Consideration*

- 4.1 See Chapter 1, "General Quality Surveillance Guidance."
- 4.2 See Chapter 12, "Material Control."
- 4.3 See Chapter 17, "Receipt of Material."

Activity Traceability

1.0 Purpose To determine that material traceability is adequate and complies with applicable codes, standards, and regulations.

2.0 Scope This guideline has been developed for use in evaluation of material control by ensuring item identification and traceability.

References

1. ANSI 45.2, "Quality Assurance Program for Nuclear Facilities."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Verify the existence of adequate procedures for the following aspects of material traceability:

- A. Identification and control of materials, parts, and components.
- B. Traceability from the items to the appropriate records where required by code, standard, or other regulatory requirements.
- C. Verification of items by heat number, part number, serial number, or other appropriate means, either on the item or on records traceable to the item throughout the installation process.
- D. Application of clear, unambiguous, indelible identification markings in such a manner as to not affect the item's function.
- E. Transference of marking to each part of an item when subdivided in such a manner to not obliterate or hide markings with surface treatment or coatings.

3.3 Select a sample of completed safety-related maintenance orders for which replacement parts were required. Verify that the items can be traced to the purchase order and to quality certification documents and that the description of the item recorded in the maintenance order matches that in the receiving documentation and in the purchase order.

4.0 Other Guidelines for Consideration

4.1 See Chapter 1, "General Quality Surveillance Guidance."

Activity Dedication

- 1.0 Purpose* To determine that the method of dedication, utilization of commercial grade items in safety-related applications, is adequate and complies with applicable codes, standards, and regulations.
- 2.0 Scope* This guideline has been developed for use in evaluation of the dedication process and methods to ensure the suitability of commercial grade items.

References

1. NRC IP 387003.
2. 10CRF50 Appendix B, Criteria III, IV, and VII.
3. ANSI N45.2, "Quality Assurance Program Requirements for Nuclear Facilities."
4. ANSI N45.2.13, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."
5. ANSI N18.7, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants."
6. Electric Power Research Institute Report EPRI NP-5652, "Guideline for the Utilization of Commercial Grade Items In Nuclear Safety Related Applications (NCIG-07)."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performances, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Ensure that the following elements are addressed by procedures for procurement of commercial grade items intended for safety-related applications.

- A. Process for determining that an item is suitable for its intended application and that the process is established so that each determination is controlled and performed consistently.
- B. Methods of determining if an item meets the designation of commercial grade.
- C. Methods for identification of critical characteristics for acceptance.
- D. Technical evaluation to ensure that requirements for an acceptable item are specified in the procurement documents.

E. Acceptance methods to reasonably ensure the item received is the item ordered and that the item is suitable for its intended application.

1. Special tests and inspections.
2. Commercial-grade survey or evaluation of suppliers.
3. Source inspection.
4. Acceptable supplier/item performance record.

F. Technical evaluation to ensure equivalency if supplier offers an alternative item.

3.3 Select a sample of commercial grade spare and replacement parts, not unique to nuclear applications, including reclassifications or classification changes (equivalent replacements and substitutions). Review the supporting acceptance package and verify that the following factors are satisfactory:

- A. Procurement documents are prepared to include identification by part number and descriptive nomenclature which is adequate to ensure that the correct item is specified.
- B. An engineering evaluation is performed to determine critical characteristics and suitability for the intended application.
- C. Appropriate technical requirements are specified in procurement documents.
- D. Appropriate acceptance methods attesting to the item's ability to function as required are included in procurement documents.
- E. Objective evidence that the item will perform its intended safety function is included in the acceptance package.
- F. The acceptance method includes the performance of a standard receipt inspection in accordance with ANSI N45.2.2. Part number verification alone is not considered an acceptable method of attesting to an item's ability to function.

4.0 Other Guidelines for Consideration

4.1 See Chapter 1, "General Quality Surveillance Guidance."

4.2 See Chapter 17, "Receipt of Material."

4.3 See Chapter 17, "Spare Parts."

Activity Services

- 1.0 Purpose* To determine that the method of procurement and acceptance of services is adequate and complies with applicable codes, standards, and regulations.
- 2.0 Scope* This guideline has been developed for use in the evaluation of purchased services by ensuring that adequate quality is maintained in procurement and performance of safety-related services.

References

1. NRC Inspection Manual, Procedure 38703.
2. ANSI N45.2.13, "Quality Requirements for Control of Procurement of Items and Services for Nuclear Power Plants."

3.0 Guidelines

3.1 In preparation for and during the conduct of this surveillance

- Obtain and review implementing procedures, instructions, and drawings governing this activity.
- Prepare a guide or checklist using the selected items from this guideline.
- Review past surveys, audits, surveillances, and other evaluations/assessments.
- Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

Note: Refer to Chapter 1 for specific details on the attributes listed above.

3.2 Ensure that the following elements are addressed by the procedures for acceptance of services:

- A. Description of acceptance methods, including technical verification of data produced, surveillance or audit of the activity, and review of objective evidence for conformance to the procurement document requirements.
- B. Technical requirements for procurement of commercial grade services.
- C. Establishment in procurement documents of the objectives for procurement of services including:
 1. What is to be accomplished.
 2. Who is to accomplish it.
 3. How it is to be accomplished.
 4. When it is to be accomplished.
 5. Criteria for acceptance of completed services.

3.3 Observe an activity performed by a supplier and verify that the following are acceptable:

- A. The purchase documents contain the elements described in paragraph 3.2.C. of this guideline.
- B. Appropriate procurement documents are completed and approved prior to commencement of work.
- C. Any supplier procedures utilized to perform work are approved prior to commencement of work.
- D. The work the supplier is performing is within the scope of the procurement documents and procedure.
- E. Certification of service personnel are on file or are presented when the supplier comes on site when purchase order requires such certification (welding, inspection, nondestructive examination, etc.).
- F. Adequate interfaces have been established for the transmittal and receipt of applicable procedures, instructions, and drawings for supplier's use.
- G. Supplier's measuring and test equipment meets calibration requirements of site procedures and the calibration certifications are on file at the site, or the supplier's calibration program has been evaluated and accepted by the utility.
- H. When a supplier proposes to install parts or components, the following is true:
 - 1. Those items are identified in procurement documents and are not procured on a document for services only.
 - 2. When a supplier proposes to install parts or components temporarily, they are controlled by an established temporary modification process.
 - 3. The parts have been receipt-inspected and accepted by the QA/QC organization prior to use.
 - 4. Any part found to be nonconforming is identified as nonconforming and handled in accordance with site procedures.
- I. That certificates issued by the vendor are representative of actual testing processes rather than being based on a paperwork review.
- J. That critical characteristics are tested and accounted for by engineering examination.
- K. That the supplier is developing required documentation of the service activities for turnover after work completion.

4.0 Other Guidelines for Consideration

4.1 See Chapter 1, "General Quality Surveillance Guidance."

4.2 See Chapter 13, "Nonconformances."

4.3 See Chapter 17, "Dedication."