

<p>U.S. Department of Energy</p>	<p>Subject: Nuclear Safety Component and Services Procurement Inspection Criteria, Inspection Activities, and Lines of Inquiry</p> 	<p>HS: HSS CRAD 45-12 Rev. : 1 Eff. Date: 06/29/2011</p>
<p>Office of Enforcement and Oversight</p>	<p>Acting Director, Office of Safety and Emergency Management Evaluations</p> <p>Date: 6/30/11</p> 	<p>Page 1 of 15</p>
<p>Criteria Review and Approach Document</p>	<p>Criteria Lead, Nuclear Safety Component Procurement</p> <p>Date: 6/29/2011</p>	

**1.0 PURPOSE**

Within the Office of Enforcement and Oversight, the Office of Safety and Emergency Management Evaluations' mission is to assess the effectiveness of those environment, safety, and health systems and practices used by line and contractor organizations in implementing Integrated Safety Management; and to provide clear, concise, and independent evaluations of performance in protecting our workers, the public, and the environment from the hazards associated with Department of Energy (DOE) activities and sites. A key to success is the rigor and comprehensiveness of our process; and as with any process, we continually strive to improve and provide additional value and insight to field operations. Integral to this is our commitment to enhance our program. Therefore, we have revised our Nuclear Safety Component Procurement Inspection Criteria, Inspection Activities, and Lines of Inquiry for internal use, and we are making them available at <http://www.hss.energy.gov/IndepOversight/ESHE/docs.html> for use by DOE line and contractor assessment personnel in developing and implementing effective DOE oversight and contractor self-assessment and corrective action processes.

**2.0 APPLICABILITY**

The following Inspection Criteria document is approved for use by the Office of Safety and Emergency Management Evaluations.

### **3.0 FEEDBACK**

Comments and suggestions for improvements of these inspection criteria, activities, and lines of inquiry can be directed to the Acting Director of the Office of Safety and Emergency Management Evaluations on (301) 903-5392.

## **Nuclear Safety Component Procurement Inspection Criteria, Inspection Activities, and Lines of Inquiry**

**Scope:** The inspection of the procurement functional area will evaluate the effectiveness of programs and processes for procuring safety systems components and services, either externally or internally, to ensure that operability, reliability, and material condition of safety systems are not compromised. Procurement includes: (1) the specifications of the physical, technical performance, shipping, storage, documentation, quality assurance/control, and other pertinent requirements for equipment, material, and services (normally performed by Engineering); (2) the processing, review, approval, and tracking of the procurement of equipment, material, and services; and (3) the receipt, storage, on-site tracking, unpacking, and issuance of procured equipment, materials, and services.

### **I. ESTABLISHING A WELL-DOCUMENTED PROCUREMENT PROGRAM**

#### **Inspection Criteria:**

- Processes, procedures, requirements, and resources have been established and implemented for procuring safety-related items and services to ensure they meet established requirements, will perform as specified, and are appropriate to the intended application (10 Code of Federal Regulation (CFR) 830.1, 10CFR 830.122 & DOE Order 414.1D, Criteria 1, 4 & 7; Nuclear Quality Assurance (NQA)-1-2000, Requirement 4 & 5, 48CFR 970.5204–2 and 970.5223-1).
- Responsibilities, authorities, and the organizational structures for the procurement of safety equipment, materials, and services are established by formal (written) procedures (10CFR 830.122 & DOE Order 414.1D, Criterion 1).
- Training and qualification programs shall be established to ensure staffs involved in procurement activities are proficient in discharging assigned responsibilities (10CFR 830.122 & DOE Order 414.1D, Criterion 2; NQA-1-2000, Requirement 2).

#### **Inspection Activity:**

- Review site/facility Quality Assurance Program requirements for procurement of safety-related items and services.
- Review site/facility procurement program, procedures and a sample of records for procurement of safety-related items and services.
- Interview the Engineering, Quality Assurance, and Procurement Managers to understand their perspective on the adequacy and challenges of the site/facility procurement processes.

#### **Inspection Lines of Inquiry:**

- Do facility programs, procedures, and processes for procurement of safety-related items and services conform to the requirements of 10 CFR 830, Subpart A, *Quality Assurance Requirements*, and the site/facility quality assurance program?

- Is the procurement process appropriately integrated with the DOE-approved Nuclear Maintenance Management Program, per DOE O 433.1B, Attachment 2, Requirement 2b(i), to ensure the availability of parts, materials, and services for maintenance activities.
- Do facility procurement programs and procedures include appropriate provisions for determining item or service procurement quality level, design implementation, configuration management, supplier qualification, component dedication, source and receipt inspection, storage and maintenance, document management, nonconforming and suspect/counterfeit items, cognizant system engineer (CSE) involvement, specifications review and approval, and program assessment activities related to procurement of safety-related items and services?
- Are responsibilities, authorities, and the organizational structures for the procurement of safety-related equipment, materials, and services established by formal (written) procedures?
- Are training programs established and implemented to ensure staff proficiency in assigned procurement program responsibilities?
- Do procedures require procurement specifications to: (1) specify design parameters and performance criteria that are in accordance with the safety basis; (2) identify applicable technical and quality assurance requirements (i.e., drawings, specifications, codes, standards, and regulations); (3) specify required manufacturer/supplier testing and the documentation of results to be provided; and (4) require a supplier from the approved list of suppliers?
- Are procurement documents required to flow down applicable regulations, contractor requirements, specifications and standards to all tiers of subcontractors and suppliers, regardless of whether items will be provided or services will be performed onsite or offsite?

## **II. IDENTIFYING SAFETY COMPONENTS AND DEFINING TECHNICAL AND QUALITY REQUIREMENTS**

### **Inspection Criteria:**

- Purchase Orders identify applicable regulations and contractor requirements, required functional and performance characteristics, and technical and quality assurance requirements that must be met to ensure the procured safety-related items, software or services are appropriate for their intended application (10CFR 830.1, 10CFR 830.122 & DOE Order 414.1D, Criteria 4 & 7; DOE Order 414.1C, Attachment 2, Section 5; NQA-1-2000, Requirement 3 & 4; NQA-1-2000, Part IV, Subpart 4.1, 48CFR 970.5204-2 and 5223-1).
- Configuration management is used to develop and maintain consistency among system requirements and performance criteria, documentation, and physical configuration for the systems, structures, and components (SSCs) (10CFR 830.122 & DOE Order 414.1D, Criteria 6 & 7; 10CFR 830.201 and 202; NQA-1-2000, Requirement 3).
- Changes to system requirements, documents, and installed components are formally designed, reviewed, evaluated under the facility's unreviewed safety question (USQ) processes, approved, and appropriately documented (10CFR 830.122 & DOE Order 414.1D, Criteria 4 & 6; 10CFR 830.203; NQA-1-2000, Requirement 3, 6 & 11).

**Inspection Activity:**

- Review the facility's configuration management plan and processes related to procurement.
- Review the facility's USQ process (or a USQ-like process typically at nuclear facilities under construction) that may be used to screen and evaluate proposed facility design modifications and changes.
- Review selected safety-related procurement packages and records supporting planned or completed construction, maintenance, and modification activities.
- Interview selected engineering, design, safety basis, and configuration management personnel (including design authorities and system engineers), as well as procurement and quality assurance staff involved in implementing procurement processes and procedures.

**Inspection Lines of Inquiry:**

- Do procurement packages (1) specify appropriate design parameters in accordance with the safety basis, design specifications and the System Design Document; (2) identify applicable functional and performance characteristics and technical and quality assurance requirements (i.e., codes and standards); and (3) specify procurement from an approved (evaluated) supplier?
- Is the selection of the supplier and content of the procurement specifications consistent with the determination of the item or service procurement quality requirements?
- Are specified system component materials consistent with the requirements and performance criteria for the system, including quality controls and quality assurance and, as appropriate, software quality assurance?
- Have the design bases and design assumptions identified in the safety analysis and other applicable design inputs been correctly and completely translated or referenced in the procurement specifications?
- Do procurement packages flow down applicable regulations, contractor requirements, specifications and standards to all tiers of subcontractors and suppliers, regardless of whether items will be provided or services will be performed onsite or offsite?
- Are applicable codes and standards appropriately translated or referenced in the procurement specifications?
- Given the content of a proposed procurement package, could a prospective supplier understand the technical scope and requirements sufficiently to appropriately fulfill them?
- Are critical or important acceptance parameters and other requirements, such as inspection/test equipment or qualified inspection/test personnel, specified in design documentation?
- Do the procurement specifications identify all required and appropriate provisions for manufacturer/ supplier non-destructive examination (NDE) and testing, and the associated documentation of results to be provided?
- Are the necessary hold points specified in the vendor's manufacturing and testing process based on a graded approach?

- Do the procurement specifications identify all documentation that must be submitted?
- Are installation instructions and post-modification testing instructions and acceptance criteria appropriately specified?
- Are inspections and tests required to be performed to verify that physical and functional aspects of items, services, and processes meet requirements and are fit for use and acceptance?
- Are the inspections and tests to be performed adequate to sufficiently determine the critical characteristics of the items being procured?
- Are procurement activities appropriately reviewed to identify and disposition introduction of any un-reviewed safety questions?
- Are cognizant design and system engineers appropriately qualified and trained to determine safety-related item safety and quality classification, develop procurement specifications, perform receipt inspections and resolve non-conformances and deficiencies?
- Are technical baseline documents (documented safety analysis (DSA), safety design description (SDD), master equipment list (MEL), drawings, etc.) that will require revision by installing the procured item been identified?
- Are safety-related components and services appropriately procured in accordance with the facility's quality assurance and procurement program?

### III. IDENTIFYING QUALIFIED VENDORS

#### **Inspection Criteria:**

- Processes have been established and implemented that ensure that approved suppliers meet specified criteria and continue to provide acceptable items and services for safety-related SSC (10CFR 830.122 & DOE Order 414.1D, Criterion 7; NQA-1-2000, Requirement 5 & 7).

#### **Inspection Activities:**

- Review facility procedures for establishing and maintaining an Approved (Evaluated) Suppliers List and a sample of records of initial qualification, in process surveillances and audits, and verification they continue to provide acceptable items and services.

#### **Inspection Lines of Inquiry:**

- Are prospective suppliers evaluated for inclusion in a site/facility Approved (Evaluated) Suppliers List against established criteria?
- To the extent necessary, do the procurement documents require suppliers to have a quality assurance program consistent with the applicable requirements of American Society of Mechanical Engineers (ASME) (NQA)-1-2008 (with the 2009 addenda) or another acceptable standard, as required by DOE O 414.1D?
- Where vendors assemble components from unapproved suppliers, has the vendor established and implemented an appropriate commercial grade dedication process?

- Is the performance of approved suppliers subject to in-process surveillances and periodic audits to verify their capability to continue to provide acceptable items and services?
- Are identified deficiencies in supplier performance or programs documented, trended, and appropriately resolved, either through corrective action or removal from the Approved Suppliers List?

#### **IV. QUALIFYING ITEMS AND SERVICES FOR SAFETY-RELATED APPLICATIONS**

##### **Inspection Criteria:**

- Procedures and processes have been established and implemented to procure and dedicate (qualify) equivalent, like-for-like, fabricated or commercial grade items for use in safety-related applications (10CFR 830.122 & DOE Order 414.1D, Criteria 4, 6, 7 & 8; NQA-1-2000, Requirement 3, 4, 5, 7, 9 & 11; NQA-1-2000, Part III, Subpart 3.1, Appendix 7.A-2).
- Procedures and processes have been established and implemented to procure and verify that services provided by unapproved suppliers are acceptable for safety-related applications (10CFR 830.122 & DOE Order 414.1D, Criteria 4, 6, 7 & 8; NQA-1-2000, Requirement 5, 7 & 9).

##### **Inspection Activity:**

- Review site/facility procedures for procurement and dedication (qualification) of equivalent, like-for-like, fabricated or commercial grade items for use in safety-related applications.
- Review site/facility procedures for procurement of services from unapproved suppliers and the processes employed to verify that the services provided are acceptable for use in safety-related applications.
- Review a sample of dedication evaluations, procurement specifications, failure modes and effects evaluations, USQ screens/determinations, and receipt inspections and testing records (including post-maintenance/modification testing) related to dedication (qualification) of equivalent, like-for-like, fabricated or commercial grade items for use in safety-related applications.
- Review a sample of procurement specifications, USQ screens/determinations and records of verification that services provided by an unapproved supplier are acceptable for use in safety-related applications.
- Interview engineering, design, procurement, and QA personnel involved in developing, reviewing, and approving procurement specifications, dedication procedures, acceptance criteria, and resulting documentations.

##### **Inspection Lines of Inquiry:**

- Does the facility have a well defined procedure and assignment of responsibilities for procurement and dedication (qualification) of equivalent, like-for-like, fabricated or commercial grade items for use in safety-related applications?

- Do the procedures require USQ screening/determination and review and approval by the CSE, Design Authority and those potentially impacted by installation of the item to be procured? Are USQ determinations versus screening always required except for like-for-like procurements?
- Do the dedication procedures require verification either by supplier certification or facility receipt inspection and testing that the procured items have the same form, fit and function, critical characteristics and failure modes as the design requires for the intended safety-related application?
- Have changes to the system that will incorporate the procured item been reviewed to ensure that system requirements and performance criteria are not affected in a manner that adversely impacts the ability of the system to perform its intended safety function?
- Do procurement specifications incorporate requirements for supplier certification of all critical characteristics of the procured items required by design that the facility cannot or does not plan to further validate?
- Are receipt inspections, dedication testing, installation instructions, and post-modification testing instructions and acceptance criteria appropriately specified?
- Are documents affected by the changes appropriately identified for revision using formal change control and work control processes?
- Are appropriate qualified personnel performing the required inspections and dedication?
- Was the USQ screening/determination performed by qualified staffs that are knowledgeable of the safety basis?
- Has the dedication process been appropriately implemented?
- Does the facility have a well defined procedure and assignment of responsibilities for procurement of services from an unapproved supplier for use in safety-related applications?
- Do USQ screens/determinations and verification records demonstrate services provided by an unapproved supplier continue to be acceptable for safety-related application?

## **V. PERFORMING SOURCE AND RECEIPT INSPECTIONS TO VERIFY QUALITY**

### **Inspection Criteria:**

- Processes and procedures have been established and are implemented to qualify source inspectors, establish appropriate manufacturing hold points, conduct source inspections, document inspection results, and track resolution of identified non-conformances (10CFR 830.122 & DOE Order 414.1D, Criterion 2, 3, 7 & 8; NQA-1-2000, Requirement 5, 7, 9, 10 & 11).
- Processes and procedures have been established and are implemented to qualify receipt inspectors, conduct receipt inspections, identify and control suspect/counterfeit items, segregate and disposition nonconforming items to prevent inadvertent use and installation,

and appropriately label and store procured items to ensure traceability and maintenance of qualifications (10CFR 830.122 & DOE Order 414.1D, Criteria 2, 3, 5, 7 & 8; NQA-1-2000, Requirement 5, 7, 8, 9, 10, 11 & 15).

- Processes and procedures have been established and are implemented to conduct necessary post-maintenance/modification testing to verify functional and critical characteristics for dedication of components for safety-related application that cannot otherwise be demonstrated (10CFR 830.122 & DOE Order 414.1D, Criteria 3, 7 & 8; NQA-1-2000, Requirement 5, 7, 9, 10 & 11).
- Processes and procedures have been established and are implemented to ensure measurement and test equipment (M&TE) used during source and receipt inspection are calibrated and maintained (10CFR 830.122 & DOE Order 414.1D, Criteria 5 & 8; NQA-1-2000, Requirement 5, 10, 11 & 12).

**Inspection Activity:**

- Review selected safety-related component source inspection plans and reports.
- Review selected safety-related components receipt inspection and testing plans and records.
- Examine material receiving inspection records to determine compliance with acceptance requirements. Where M&TE is used, verify calibrations are current.
- Interview receipt inspectors to determine their understanding of what to look for when seeking to identify suspect/counterfeit items, and how such items and nonconforming parts should be handled.

**Inspection Lines of Inquiry:**

- Are inspections and tests performed to verify that physical and functional aspects of materials and components meet requirements and are fit for use and acceptance during source and receipt inspections?
- Are source inspection, receipt inspection, and testing requirements appropriately specified with applicable manufacturing and assembly hold points, inspection and/or testing instructions, acceptance criteria, calibrated M&TE, qualified personnel and documentation/records requirements?
- Where source inspections are planned, are sufficient inspection resources supplied to effectively implement planned surveillance and inspection activities? Do those plans include monitoring selected activities and inspection of selected attributes at predetermined points in the manufacture and assembly of the component or system commensurate with the complexity of the item and the inability to verify important critical characteristic after the fact?
- Is there a clear linkage between the inspection and test acceptance criteria and the safety documentation, and are the acceptance criteria capable of confirming that safety/operability requirements are satisfied?
- Are safety parts inspected to ensure that the vendor has supplied what was ordered and has included appropriate documentation (e.g., Certificate of Compliance, certified material test record), and that they are received in acceptable condition, as defined in the approved requisition?

- Where a certificate of conformance (COC) is used for acceptance, determine whether the COC: (1) identifies the purchased material or item; (2) specifies the requirements met and not met; (3) evidences supplier quality assurance (QA) review; (4) indicates the procedures or quality assurance program that was followed; (5) is signed by a QA representative of the supplier; and, (6) enables receiving inspection to determine that purchaser/agent has verified by audit the validity/effectiveness of the supplier's COC system.
- Where post-maintenance/modification testing is required to demonstrate acceptable functional and performance characteristics, are appropriate testing instructions and acceptance criteria specified and are records of that testing required to be referenced or a part of the procurement records?
- Are the results of receipt inspections clearly shown on the part via acceptance tags, etc., and are suspect/counterfeit items and nonconforming materials clearly tagged and separately stored to prevent inadvertent use?
- Are appropriate methods and documentation requirements followed for the control and disposition (use-as-is, repair, replace) of nonconforming materials?
- Are the results of source and receipt inspections tracked and trended to identify recurring procurement and supplier problems, and where problems are identified, are corrective actions timely and effective?
- Are personnel knowledgeable and able to satisfactorily perform required inspections and tests?
- Did appropriate personnel review and approve the inspection or test results and take appropriate action?
- Do construction materials, such as concrete, metals, fasteners and wire, meet design specifications?
- Are services provided by a supplier verified acceptable for safety-related application by appropriate (1) technical verification of the data produced; (2) surveillances and/or audits of the activity; and/or (3) review of objective evidence of conformance to procurement document requirements?

## **VI. STORING THE ITEMS IN A MANNER THAT PRESERVES THEIR INTEGRITY**

### **Inspection Criteria:**

- Processes and procedures have been established and implemented for appropriate storage and maintenance of procured safety-related items to ensure they are retrievable, traceable to their QA records, and continue to be qualified for use for their intended application (10CFR 830.122 & DOE Order 414.1D, Criterion 5; NQA-1-2000, Requirement 5, 8 & 13; NQA-1-2000, Part II, Subpart 2.2).

**Inspection Activity:**

- Walk-down storage areas to determine whether storage activities are in compliance with QA requirements for storage of safety-related items.
- Review shelf- life records and controls for stored safety-related items and materials.
- Review preventative maintenance records and controls for stored safety-related items.

**Inspection Lines of Inquiry:**

- Are safety-related items appropriately identified and segregated from normal stock to indicate status and ensure proper application?
- Are safety-related materials and equipment stored in a manner that provides for appropriate environmental protection, physical access control, and records of traceability to associated quality records?
- Are conditions such as shelf-life that require component and materials replacement identified and implemented?
- Are appropriate preventive maintenance requirements for stored safety-related equipment identified and implemented?
- Are routine inspections being conducted of storage facilities and items, and are deficiencies identified and corrected?

**VII. TRACKING AND TRACING THE ITEMS THROUGH THEIR LIFECYCLE****Inspection Criteria:**

- Quality assurance records are controlled and maintained to provide documentation for qualified parts and materials and to ensure traceability of parts and materials (10CFR 830.122 & DOE Order 414.1D, Criteria 4 & 5; NQA-1-2000, Requirement 5, 6, 8, 14 & 17).

**Inspection Activities:**

- Review selected quality assurance records for stored, issued, and installed safety-related parts and materials to verify traceability to their design requirements and associated quality demonstrating procurement records.

**Inspection Lines of Inquiry**

- Does the procurement processes provide effective material procurement status including accurate stock records, tracking of purchase orders, and maintaining traceability of safety-related parts and material?
- Are methods in place to ensure that parts, materials, and equipment are controlled; e.g., used in the correct application, and the required quality assurance traceability is maintained after issuance from storage?
- Are parts, materials, and equipment removed from storage but not yet installed receiving the same care as required prior to removal?

- Are safety-related parts only issued to individuals on authorized requester lists?

## **VIII. PREVENTING USE OF SUSPECT/COUNTERFEIT ITEMS (S/CI)**

### **Inspection Criteria:**

- Procedures and training requirements have been established and implemented for identification, segregation, reporting and disposition of suspect/counterfeit items (S/CI) to prevent their use during construction, operations, maintenance and modifications (DOE Order 414.1D, Attachment 2, Section 4; 10CFR 830.122 & DOE Order 414.1D, Criterion 2, 3, 5, 7 & 8; NQA-1-2000, Requirement 2, 5, 8, 10 & 15).

### **Inspection Activities:**

- Review site/facility S/CI prevention program.
- Interview site identified S/CI program point-of-contact.

### **Inspection Lines of Inquiry**

- Has a site/facility S/CI prevention program been established and implemented for control of suspect/counterfeit materials in accordance with DOE O 414.1D?
- Have procurement, receipt inspectors, stores, maintenance, construction, engineering, operations, and quality assurance staffs and managers been trained and periodically re-trained to recognize and report identification of S/CIs to a site identified S/CI program point-of-contact.
- Are suspect/counterfeit items required to be clearly tagged and separately stored to prevent inadvertent use?
- Are appropriate requirements for reporting discovery of suspect/counterfeit items been established and implemented?
- Are appropriate methods established and implemented for disposition of suspect/counterfeit items?
- Are site/facility staffs informed of recently discovered S/CI on site and across the DOE complex and the nation.

## **IX. APPLYING SYSTEM ENGINEER OVERSIGHT TO ENSURE SAFETY SYSTEM OPERABILITY AND RELIABILITY**

### **Inspection Criteria:**

- CSEs are appropriately involved and integrated into the procurement processes for items and services intended for safety-related applications to ensure configuration management and that change to assigned system design requirements, physical configuration, or documentation (including analysis, drawings, and procedures) are controlled and effectively implemented in accordance with established configuration management program requirements (10CFR

830.122 & DOE Order 414.1D, Criteria 4 & 6; 10CFR 830.201, 202 and 203; NQA-1-2000, Requirement 4, 5 & 6).

- CSE qualification and training requirements must include knowledge of system safety basis and requirements, configuration management, USQ screening/determinations, system design, procurement, maintenance, modification, testing, and related quality assurance requirements (10CFR 830.122 & DOE Order 414.1D, Criterion 2; 10CFR 830.201, 202 and 203; NQA-1-2000, Requirement 2).

**Inspection Activities:**

- Review contractor's cognizant system engineering program description and procedures, training, and qualifications requirements as they relate to procurement and configuration management.
- Review safety-related procurement specifications, records, and dedication plans.
- Interview involved CSEs.

**Inspection Lines of Inquiry:**

- Are CSEs appropriately integrated into procurement and dedication processes and procedures, and in the USQ determination processes in order to ensure configuration management?
- Do CSEs review and concur on procurement specification for safety-related items and services?
- Do CSEs review and approve source inspection, receipt inspection and dedication testing plans, procedures, and acceptance criteria for safety-related items?
- Do CSEs review and approve the results of source inspection, receipt inspection, and dedication testing of safety-related items?

**X. PERFORMING ASSESSMENTS TO ENSURE THAT THE PROCUREMENT PROGRAM IS FUNCTIONING AS INTENDED**

**Inspection Criteria:**

- Procedures and plans have been established to assess the performance of the procurement program, identify needed improvements, and track and assess the effectiveness of corrective actions (10CFR 830.122 & DOE Order 414.1D, Criteria 3, 9 & 10; NQA-1-2000, Requirement 5 & 18).

**Inspection Activity:**

- Interview procurement and quality assurance staff to determine how assessments are planned and performed and how they are used to improve performance.
- Review procurement assessment reports, documentation of needed improvements, planned or taken corrective actions, and results of corrective actions effectiveness reviews.
- Review assessment activity schedules for independent, management, and self-assessments of the effectiveness of the procurement program.

- Interview engineers (design and system), maintenance supervisors and staff, and operations personnel to determine whether and how their feedback is solicited and acted upon to foster improvements.
- Review trend analysis and performance indicator reports and evaluate the analyses, conclusions, and any related corrective actions.
- Review a sample of corrective actions covering deficiencies identified in assessments.

**Inspection Lines of Inquiry:**

- Are assessments performed to verify the quality of procured items and services, to measure the adequacy of performance of procurement processes, and to promote improvements?
- Have rigorous independent assessments and management assessments (self-assessments) of procurement processes and implementation been performed, causal analyses conducted where needed, and appropriate corrective actions developed and implemented? Have there been effectiveness reviews of corrective actions?
- Have guidance and support tools such as checklists, templates, and databases for performing assessments been provided?
- Are there recurring problems or deficiencies in procurement program implementation? If so, why haven't corrective actions been effective?
- Are managers effectively utilizing performance measures to demonstrate performance improvement or deterioration relative to identified goals, in allocating resources and establishing performance goals, in development of timely compensatory measures and corrective actions for adverse trends, and in sharing good practices and lessons learned?
- Are assessment activities sufficiently performance-based, including appropriate focus on procurement specification development, supplier deviation disposition reports processing effectiveness, receipt inspection instructions and acceptance criteria development, nonconformance reporting and disposition, and S/CI identification and reporting?

**REFERENCES:**

1. 10 CFR Part 830, Nuclear Safety Management, Subpart A, Quality Assurance Requirements.
2. DOE Order 414.1D, Quality Assurance.
3. DOE Order 420. 1B Chg 1, Facility Safety.
4. DOE Order 433.1B, Maintenance Management.
5. DOE Guide 433.1-1, Nuclear Facility Maintenance Management Program Guide for Use with DOE O 433.1.
6. The Office of Health, Safety and Security (HSS) Independent Oversight Focus Area Review of Safety Component Procurement at DOE Facilities, June 2009.
7. HSS CRAD 64-11, Rev-2, Essential Systems Functionality Inspection Criteria, Inspection Activities, and Lines of Inquiry, Effective 10/16/2008.
8. HSS CRAD 64-17, Rev-0, Nuclear Facility Safety System Functional Inspection Criteria, Inspection Activities, and Lines of Inquiry, Effective 09/24/2009.
9. HSS CRAD 64-19, Rev-0, Engineering Design and Safety Basis Inspection Criteria, Inspection Activities, and Lines of Inquiry, Effective 12/22/2009.

10. ASME NQA-1-2000, Quality Assurance Requirements for Nuclear Facility Applications
11. DOE G 414.1-2A, Quality Assurance Management System Guide for Use with 10 CFR 830 Subpart A Quality Assurance Requirements and DOE O 414.1D, Quality Assurance.
12. DOE G 414.1-3, Suspect/Counterfeit Items Guide for Use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1B, Quality Assurance.
13. DOE G 414.1-4, Safety Software Guide for use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1D, Quality Assurance.
14. DOE G 414.1-1A, Management Assessment and Independent Assessment Guide for Use with 10 CFR, Part 830, Subpart A, and DOE O 414.1A.
15. NRC Information Notice 2011-01, Commercial Grade Dedication Issues Identified During NRC Inspections.
16. DOE Acquisition Regulations (DEAR) 48 CFR 970.5204-2 and 5223-1.