**DOE O 226.1A, IMPLEMENTATION OF DEPARTMENT OF ENERGY
OVERSIGHT POLICY
CONTRACTOR ASSURANCE SYSTEMS CRITERIA
ATTACHMENT 1, APPENDIX A**

DEFINITIONS

"Assurance systems" encompass all aspects of the processes and activities designed to identify deficiencies and opportunities for improvement, report deficiencies to the responsible managers, complete corrective actions, and share in lessons learned effectively across all aspects of operation.

"Site programs" refers to programs that protect the public, workers, environment, and national security interests or support essential mission activities. Site programs specifically include environment, safety, and health; safeguards and security; cyber security; emergency management; and business operations programs.

"Site management systems" refers to required management systems that provide the framework for a set of related site programs. Site management systems specifically include Integrated Safety Management, Integrated Safeguards and Security Management, and Quality Assurance Programs.

REQUIREMENTS

a.   DOE contractors must establish a comprehensive and integrated contractor assurance system in accordance with quality assurance requirements (as stated in 10 CFR Part 830, Subpart A, or other applicable regulations), applicable DOE directives (e.g., O414.1C), and contract terms and conditions. A contractor's assurance processes must encompass all of the various activities designed to—

   (1)   identify deficiencies and opportunities for improvement,
   (2)   report deficiencies to the responsible managers and authorities, and
   (3)   implement effective corrective actions.

b.   Assurance activities must encompass environment, safety, and health; safeguards and security; cyber security; and emergency management and must include—

   (1)   assessments (including self-assessments, management assessments, and internal independent assessments as defined by laws, regulations, and DOE directives such as quality assurance program requirements) and other structured operational awareness activities (e.g., management walkthroughs);
   (2)   incident/event reporting processes, including accident investigations;
   (3)   worker feedback mechanisms;

(4)   issues management, including causal analysis, identification of corrective actions and recurrence controls, corrective action tracking and monitoring, closure of corrective actions and verification of effectiveness, trend analysis, and identification of continuous improvement opportunities;

(5)   lessons-learned programs; and

(6)   performance indicators/measures.

c.   Contractor assurance system data must be documented and readily available to DOE. Results of assurance processes must be periodically analyzed, compiled, and reported to DOE in support of the formal contract evaluation.

d.   Contractors must integrate processes for corporate audits, third-party certifications, or external reviews by experts in designing and implementing the contractor's assurance system.

e.   Program effectiveness can be certified by third parties to provide management with assurance that program elements meet national standards and reviewers' expectations. Although third-party certification can complement internal assurance systems, it is not a substitute for rigorous internal assurance system processes.

f.   Contractors must monitor and evaluate all work performed under their contracts, including the work of subcontractors.

ASSESSMENTS

A rigorous and credible assessment program is the cornerstone of effective, efficient management of programs such as environment, safety, and health; safeguards and security; cyber security; and emergency management.

Contractors will be responsible for developing, implementing, and performing comprehensive assessments of all facilities, systems, and organizational elements, including subcontractors, on a recurring basis. The scope and frequency of assessments must be specified in site plans and program documents (e.g., the quality assurance program) and must ensure that required assessments by applicable DOE directives are being performed; the effectiveness of safety management programs, including programs that are credited in the safety basis for nuclear facilities are being assessed adequately; deficiencies are being self-identified; and corrective actions are being taken in a timely and effective manner. External peers or subject matter experts may be utilized to support assessment activities.

a.   Self-Assessment is used to evaluate performance at all levels periodically and to determine the effectiveness of policies, requirements, and standards and the implementation status (see also DOE Order 414.1C, Criterion 9, "Management Assessment").

      (1)   Management self-assessments (also called management assessments) are performed by contractor management, and are developed (scope and review criteria) based on the nature of the facility/activity being assessed and the hazards and risks to be controlled.

      (2)   Self-assessments, which focus on hands-on work and the implementation of administrative processes, involve workers, supervisors, and managers to encourage identification and resolution of deficiencies at the lowest level practicable (e.g., workplace inspections and post-job reviews).

      (3)   Support organizations will perform self-assessments of their performance and the adequacy of their processes.

      (4)   Contractor, at all levels, will assess the implementation and adequacy of their processes, including analysis of the collective results of lower-level self-assessments.

      (5)   Self-assessment results will be documented commensurate with the significance of and risks associated with activities being evaluated. Deficiencies will be accurately described and documented for evaluation and correction using formal issues management processes.

b.   Internal independent assessments will be performed by contractor organizations or personnel that have authority and independence from line management, to support unbiased evaluations (see also DOE Order 414.1C, Criterion 10, "Independent Assessment").

      (1)   The assessments will be formally planned and scheduled based on the risk, hazards, and the complexity of the processes and activities to be evaluated.

      (2)   Independent evaluators will be appropriately trained and qualified and have knowledge of the areas assessed.

      (3)   Reviewers will be dedicated contractor staff, members of external organizations, or both.

      (4)   Although independent assessments are applied to individual activities and processes, they will typically focus on entire facilities or projects, and programs and management processes that are used by multiple organizations.

      (5)   Internal independent assessments will concentrate on performance and observation of work activities and the results of process implementation.

EVENT REPORTING

Formal programs will be established and effectively implemented to identify issues and report, analyze, and address operational events, accidents, and injuries.

a.   Reportable occurrences that meet occurrence reporting and processing system thresholds and associated corrective actions will be evaluated, documented, and reported as required by the DOE directive (M 231.1-1, Environment, Safety and Health Reporting Manual).

b.   For activities covered by the Price-Anderson Amendments Act, nuclear and worker safety and health issues (e.g., noncompliance) meeting DOE reporting thresholds should be self-reported through the DOE-wide Noncompliance Tracking System to mitigate the severity level of the violation and potential financial penalties.

c.   Trending analysis of events, accidents, and injuries is performed in accordance with structured/formal processes.

WORKER FEEDBACK

In addition to structured assessments, DOE contractors will establish and implement processes to solicit feedback from workers and work activities. Common feedback mechanisms are described in site plans/program documents and include the following:

a.   employee concerns programs,
b.   telephone or intranet "hotline" processes for reporting concerns or questions,
c.   pre-job briefs,
d.   job hazard walk-downs by workers prior to work,
e.   post-job reviews,
f.   employee suggestion forms,
g.   safety meetings,
h.   employee participation in committees and working groups, and
i.   labor organization input.

ISSUES MANAGEMENT

Contractors must ensure that a comprehensive, structured issues management system is in place. This system must provide for the timely and effective resolution of deficiencies, and be an integral part of effective contractor assurance system (see also DOE Order 414.1C, Criterion 3, "Quality Improvement").

a.   Program and performance deficiencies, regardless of their source, must be captured in a system or systems that provide for effective analysis, resolution, and tracking. Issues management must include structured processes for—

        (1)   determining the risk, significance, and priority of deficiencies;
        (2)   evaluating the scope and extent of the condition or deficiency (e.g., applicability to other equipment, activities, facilities, or organizations);
        (3)   determining event reportability under applicable requirements (e.g., Price-Anderson Amendments Act, Occurrence Reporting and Processing System, security incident reporting);
        (4)   identifying root causes (applied to all items using a graded approach based on risk);

(5) identifying and documenting suitable corrective actions and recurrence controls, based on analyses, to correct the conditions and prevent recurrence;

(6) identifying individuals/organizations responsible for implementing corrective actions;

(7) establishing appropriate milestones for completion of corrective actions, including consideration of significance and risk;

(8) tracking progress toward milestones such that responsible individuals and managers can ensure timely completion of actions and resolution of issues;

(9) verifying that corrective actions are complete;

(10) validating that corrective actions are effectively implemented and accomplish their intended purposes, using a graded approach based on risk; and

(11) ensuring that individuals and organizations are accountable for performing their assigned responsibilities.

b. Issues management will provide a process for rapidly determining the impact of identified weaknesses and taking timely action to address conditions of immediate concern. For such conditions, interim corrective actions (e.g., stopping work, shutting down activities, or revising a procedure) are to be taken as soon as a condition is identified and without waiting until a formal report is issued.

c. Processes for analyzing deficiencies, individually and collectively, must be established to enable the identification of programmatic or systemic issues. Process products will be used by management to monitor progress in addressing known systemic issues and to optimize the allocation of assessment resources.

d. Sites must have effective processes for communicating issues up the management chain to senior management, using a graded approach that considers hazards and risks. The processes must provide sufficient technical basis to allow managers to make informed decisions and must include provisions for communicating and documenting dissenting opinions. Processes for resolving disputes about oversight findings and other significant issues must be implemented. The processes must include provisions for independent technical reviews of significant issues.

LESSONS LEARNED

Formal programs must be established to communicate lessons learned during work activities, process reviews, and event analyses to potential users and applied to future work activities. Contractors must identify, apply, and exchange lessons learned with the rest of the DOE complex. Contractors must review and apply lessons learned identified by other DOE organizations and external sources to prevent similar occurrences (see also DOE Order 414.1C, Criterion 3, "Quality Improvement").

PERFORMANCE MEASURES

Contractors must identify, monitor, and analyze data measuring the performance of facilities, programs, and organizations. The data must be used to demonstrate performance improvement or deterioration relative to identified goals. Using a program to analyze and correlate data, contractors must suggest further improvements and identify good practices and lessons learned. To accomplish these objectives, contractors must establish programs that identify, gather, verify, analyze, trend, disseminate, and make use of performance indicators (see also DOE Order 414.1C, Criterion 3, "Quality Improvement").

Performance indicator data must be considered in allocating resources, establishing goals, identifying performance trends, identifying potential problems, and applying lessons learned and good practices. Quantitative performance indicators/measures also may be considered in evaluating performance and establishing oversight priorities. However, quantitative performance measures provide only a partial indication of system effectiveness and must be considered in combination with other appraisal and operational awareness results.