		Number: EA OLOI 30-02 Revision: (Rev. 0) Effective Date: July 5, 2017
Oversight Program Implementation – DOE Field Element **Objectives and Lines of Inquiry**		
Authorization and Approval	W Shillen for Director, Office of Environment, Safety and Health Assessments Date: 7-6-17	Jimmy S. Dyke Lead, Office of Environment, Safety and Health Assessments Date: 7-5-17

1.0 PURPOSE

The mission of the U.S. Department of Energy (DOE) Office of Environment, Safety and Health Assessments (EA-30) is to conduct evaluations of safety and emergency management systems and practices used by line and contractor organizations and to provide clear, concise, rigorous, and independent evaluation reports of performance in protecting workers, the public, and the environment from the hazards associated with DOE activities.

The purpose of this review is to evaluate the Federal elements effectiveness in implementing an oversight system that is complimentary to the sites contractor assurance systems, has a performance based focus, recognizes the hazards at the site/activity and incorporates the associated degree of risk in decision making, and gives additional emphasis to potentially high consequence activities when warranted. In addition, the oversight system ensures that relevant line management issues are effectively communicated to the operating contractors, and ensures that problems are evaluated and corrected on a timely basis.

The current revision of EA's OLOI's are available at http://www.energy.gov/ea/criteria-and-review-approach-documents.

2.0 APPLICABILITY

The following OLOI is approved for use by all EA-30 Reviews.

3.0 FEEDBACK

Comments and suggestions for improvements on this OLOI can be directed to the Director, Office of Environment, Safety and Health Assessments, at (301) 903-5392.

4.0 OBJECTIVES AND LINES OF INQUIRY

The review approach utilizing these objectives and lines of inquiry (OLOI) is designed to be exploratory in nature, seeking to understand how the Federal element conducts oversight, how the oversight approach is evolving and how the Federal element and the operating contractor view oversight effectiveness. A reference model was constructed from a literature review and is intended to assist the team to focus their attention to key aspects of oversight, recognizing the time frame allocated for the review, and the goal of providing value added insights to promote improvement, in contrast to a detailed examination of an oversight program. The ultimate goal of the review is to identify feedback that might offer beneficial insights or approaches for improvement by the responsible Federal element.

The OLOI's are intended to establish a broad framework of the review inquiry. They are intended to probe for greater detailed, and are provided for each of the objectives associated with the oversight model. Probe questions are intended to serve as guides for team members and are not to substitute for judgement and knowledge of the team members in seeking to elicit information and insights to support the main purpose of the review as to provide value added feedback for management.

The Objectives and LOI's are structured to gain insights into the following questions:

- What is the DOE field elements implicit "theory" of oversight and are management and oversight personnel aligned on that theory?
- Is this "theory" of oversight supported by espoused values, given structure by a coherent vision captured and communicated by an Oversight model and implemented by trained and qualified oversight personnel who have the tools, motivation and incentives to carry out that vision?
- Does the DOE field element have a "graded response" set of oversight tools that provides for multiple levels of performance monitoring and analysis as well as multiple types of actions available to influence contractor behavior?
- Are the DOE field element and the operating contractor aligned on the respective roles and responsibilities of each organization?
- Are the behaviors of the oversight personnel consistent with the managements vision and model, and does the contracting organization perceive those behaviors to be consistent with the espoused values of the DOE field element, processes and agreed upon roles, responsibilities and behaviors?
- Does the Federal Element have the capabilities, resources and authority to anticipate and respond to changes in the environment (e.g. funding, key personnel changes, national priorities) to sustain the mission in the presence of uncertainties; i.e. does the DOE field element pursue a strategy of resilience in its' oversight role?

OBJECTIVES AND LINES OF INQUIRY

FCI.1: Mission, Vision and Values are defined, communicated, and are foundational for continuing individual and organizational reflection on the goal of the oversight processes.

Lines of Inquiry:

- Are the mission, vision and values defined?

- Are the mission, vision & values communicated as part of normal work?
- Are multiple communication methods employed to promote awareness of and dialogue about mission, vision and values?
- How do the mission, vision and values influence the performance of work assignments?
- Have you encountered circumstances in which activities of the oversight office or the contractors seemed to conflict with the mission, vision or values? (If so, how were these conflicts addressed?)
- How does the oversight program use a sampling approach to provide reasonable assurance of protection of health, safety and security?

FCI.2: The roles and responsibilities of the oversight organizational are defined, understood and serve the mission and workforce needs. The organizations conducting oversight assures that the personnel adequately accomplish their oversight duties in compliance with the documented and approved oversight program:

Lines of Inquiry:
- Who is responsible for day to day safety and security?
- How would you characterize the role of the field element?
- Do roles and responsibilities recognize the combination of technical, relationship and administrative skills necessary to perform professional oversight?
- Are roles and responsibilities for oversight sufficiently clear?
- Are consequences for good and poor employee oversight performance clear and uniformly applied?
- Have you experienced situations where it was unclear who would have information important to your work tasks or who were the relevant decision makers for concerns you might identify?
- Have you encountered situations where requirements or standards were not clear or did not exist? (If so how were these situations handled?)
- Are the responsibilities and actions of DOE-HQ element aligned with and supportive to the oversight of Federal field element?
- What is your perception of how the local public, stakeholders or contractor personnel view the credibility of Federal field element oversight?
- Are there members of the Federal field element staff considered as leading experts in their areas?
- Are staff trusted to analyze all data sources and formulate a proactive oversight strategy in their functional area?
- What are you doing to promote resiliency in Federal field element and the contractor community?
- What does Federal field element do to promote the long term workforce and intellectual resources?

FCI.3: A structured framework, supported by a management system, is used to guide, monitor and improve oversight functions and activities

Lines of Inquiry:
- How would you describe the Federal field element oversight framework?
- To what extent are the contractor data streams through CAS of sufficient quality and quantity to develop a sense of contractor strengths and vulnerabilities?
- To what extent do you rely on CAS for insights compared to relying on Federal field element direct assessment/inspection?
- How does Federal field element determine the strengths of the contractor management systems?
- Are your activities geared toward functional areas or big picture?
- Do your activities tend toward identifying compliance or performance issues?
- How do you address the role and contributions of the contractor corporate board?
- How are decisions made about performance improvement and recognition - internal and contractor?

FCI.4: Data collection and analysis are based on sampling of the operating organization activities, programs and processes; address technical, organizational and human factors; are iterative seeking to build a holistic picture of performance; and are used by the oversight organization to detect potential performance drift.

Lines of Inquiry:

- What is the general process for deciding what will be assessed and how?
- How is risk significance used in determining what to assess?
- What are your strengths of your oversight efforts?
- What type of oversight tools do you use most often?
- What type of oversight tools do you think are most effective?
- What is the percentage of your interactions with contractors that emphasize the positive vs the negative?
- Do you have examples of instances where trends were identified through analysis?

FCI.5: Measures of Oversight Culture are established

Lines of Inquiry:

- How do you know how well your oversight efforts are working?
- What type of measures are used to monitor oversight effectiveness?
- How do you examine the value that oversight provides?
- How do you monitor oversight staff knowledge and skills?
- How do you monitor oversight management knowledge and skills?
- How do you monitor the relationships and communication between oversight and contractors?
- How do you monitor the relationship between Federal field element, NNSA HQ and other influential groups?
- How do you measure the effectiveness of change efforts?
- How do you measure organizational culture of Federal field element and the contractor?

Examples of possible measures:

- ✓ Self-reflection on Mission Statement and Oversight Culture
- ✓ Improvement of mutual knowledge and understanding
- ✓ Fostering overall cooperation
- ✓ Culture of decision-making
- ✓ Project management and project leadership
- ✓ Human resources development
- ✓ Management system
- ✓ Tools for work
- ✓ Basis and framework for oversight (regulatory framework)
- ✓ Evaluation and monitoring of the measures

(Source: Systemic Perspective on Safety Culture | 06.10.2014 | C. Ryser)

FCI.6: The organization demonstrates awareness and alignment of essential aspects of Oversight Culture:

Lines of Inquiry:

- How would you define good oversight?
- How well does Federal field element oversight perform in comparison to your definition?

- Can you provide examples of where Federal field element was particularly successful in using oversight to solve important issues?
- Does the contractor organization understand the Federal field element oversight approach?
- Are your oversight activities perceived as professional and constructive by the contractor?
- Do you know your operator contractor by name?
- How well do people in different Federal field element organizations collaborate with each other?
- If you are "pulling the string" on an issue and it leads to a different functional area how do you coordinate?
- Are there situations in which you have perceived that public or political concerns influence the conduct of oversight activities or the outcomes of such activities?
- Can you recall examples of successful decision-making about complex performance issues?
- How might Federal field element oversight be improved?
- Do oversight staff attend meeting with the operating contractor to discuss identified issues and performance problems?

FCI.7: DOE field element line management has established and implemented effective oversight processes that evaluate the adequacy and effectiveness of contractor assurance systems.

Lines of Inquiry:

- Has the DOE field element line management established and implemented oversight processes that evaluate contractor and DOE programs and management systems, including site assurance systems, for effectiveness of performance (including compliance with requirements)?
- How does the DOE field element line oversight program develop written plans and schedules for planned assessments, focus areas for operational oversight, and reviews of the contractor's self-assessment of processes and systems?
- How does the DOE field element capture their identified issues in an issues management process that is capable of categorizing findings based on risk and priority, ensuring relevant line management findings are effectively communicated to the contractors, and ensuring that problems are evaluated and corrected on a timely basis?
- How are the oversight processes tailored according to the effectiveness of contractor assurance systems, the hazards at the site/activity, and the degree of risk, giving additional emphasis to potentially high consequence activities and areas of poor performance?
- How does the DOE line management communicate oversight results and other issues in a timely manner up the line management chain, and to the contractor as appropriate, sufficient to allow senior managers to make informed decisions?

REVIEW APPROACH

Record Review:

- Description of oversight processes implemented
- Assessment plans
- Assessment reports
- Corrective action plan for issues(s)
- Document revisions as a result of corrective action(s)
- Training materials prepared for oversight process or training
- Correspondence concerning oversight results or corrective actions

Interviews:

- Executive Leadership Team

- Facility Representatives
- Subject Matter Experts
- Operating Contractor Management
- Operating Contractor Personnel Processing Field Element Issues

Focus Groups:
- Facility Representatives
- Subject Matter Experts
- Operating Contractor Management
- Operating Contractor Personnel Processing Field Element Issues

Observations (non-mandatory):
- Field element personnel performing operational awareness activities or oversight data collection
- Field element meetings discussing oversight results
- Field element meetings discussing safety issues
- Field element meetings discussing safety performance

Appendix A
Assessment Model of Oversight Program Implementation

A. Important concepts that inform the OLOIs and EA reference model:

The following items were identified from a literature review of sources cited in the references section. Items 1 – 7 are from Supplemental Directive SD 226.1B, *NNSA Site Governance*; items 8 – 11 are summarizations from other literature sources. These concepts were used to construct a reference model of nuclear oversight.

The purpose of the reference model is to align the EA team on important concepts to enhance credibility of conclusions the team may draw on the issue of effectiveness. At the time of this review formal criteria of effectiveness and value added have not been developed or validated for the DOE oversight functions of governance. As the nuclear oversight community is relatively small, the body of published literature on oversight effectiveness is sparse and effectiveness assessment, to the extent that it is performed, is often a function of expert or peer review. However, there is a small body of relevant literature that can aid EA in reflecting on the oversight effectiveness; those seem helpful are listed in the reference section.

1. **NNSA DOE/NNSA Enterprise Strategic Vision**
   "Our core mission pillars are to maintain a safe, secure, and effective nuclear deterrent; to prevent, counter, and respond to the threats of nuclear proliferation and terrorism worldwide; and to provide naval nuclear propulsion. To accomplish this mission, we must maintain crosscutting capabilities that enable each mission pillar, including advancing world-class science, technology, and engineering (ST&E); supporting our people and modernizing our infrastructure; and developing a management culture that operates a safe and secure enterprise in an efficient manner."

2. **NNSA Site Governance Model**
   - NNSA must operate within a Site Governance Model that is comprised of three overlapping evaluative systems focused on continuous improvement of all activities and functional areas that can affect mission reliability: (1) the Federal NNSA team including program, functional, and field offices; (2) the contractor partner operating the sites or facilities; and (3) the contractor partner corporate parent(s), as specified by contract. Effective governance requires that all three entities work together to ensure reliable mission performance. (Attachment 2 of the SD provides details.)

   - The depth of federal oversight must be determined based on the demonstrated strength of the contractor's management systems and the risks associated with less than satisfactory performance. High risk activities and areas with significant performance weaknesses must be evaluated to determine the necessary activity-specific oversight, as defined by the Federal Oversight Description Document.

   - The Site Governance System must be transparent and encourage efficiencies. Data generated from oversight and assurance activities must be shared to allow each partner to identify positive and adverse indicators and opportunities for improvement.

3. **Performance based:**
"Performance-Based: An approach where greater emphasis is placed on the performance and risk impact of issues discovered rather than on simply the existence of specific non-compliance issues. Performance-based, system level oversight is used to assess contractor performance by evaluating the contractor's processes and management systems and the data normally generated by these systems. In a performance-based approach, the assessor addresses the localized, as well as the broader, impact of the issues against the overall adequacy, efficiency, and cost-effectiveness of what is being assessed."

4. **Reliable Mission Performance**:
"Performance by the contractor where (1) NNSA mission objectives are met; (2) workers, the public, and the environment are protected, assets are secure; and (3) operational and business systems are effectively managed within contract requirements."

5. **Oversight Approach:**
Federal and corporate parent oversight is primarily system level and performance based. Field oversight is contractor CAS focused coupled with risk informed sampling by direct assessment and observation.

6. **Constructive Dynamic Tension**
"The constructive dynamic tension involves economic aspects of the contract in which the government incentivizes the contractor to perform the highest priority mission objectives with safety, security, economy, and efficiency; through a learning organization that achieves continuous improvement. The government exploits that constructive dynamic tension to the financial benefit of the taxpayers, to the mission benefit of our citizens and allies, and to the operational benefit of our contractors."

7. **Collaborative**

NNSA Site Governance System requires all the partners (the Federal team, contractor, and corporate parent(s)) working collaboratively to ensure reliable mission performance."

8. **What does good oversight look like?**

Oversight is understood as being more than the pure supervision of compliance with the body of rules (requirements, standards, guidelines) but also considers a proactive component to be part of the oversight mandate, in the sense of improving safety and bolstering the perception of responsibility on the part of the supervised parties.

9. **Fundamental premise:**

The regulator must be aware of its own oversight culture and of its impact on the licensees
•... in order to be able to positively influence licensees' safety culture
•... in order to avoid negative impact

10. **Principles:**
- The oversight authority carries out the dual mandate of mission accomplishment while protecting people and the environment.

- Oversight strengthens the culture for safety the supervised parties, and encourages them to take responsibility for their own actions.

- The oversight authority sets an example; they are aware of their function as a role model, and they perform that function as integral to oversight professionalism.

11. **Basic assumptions underlying oversight excellence:**

- The prime responsibility for safety rests with the organization responsible for facilities and activities that give rise to risks

- Oversight conducts its assurance responsibilities from a Systemic Perspective

- The oversight organization must be aware of its own oversight culture and of its impact on the operator and mission stakeholders

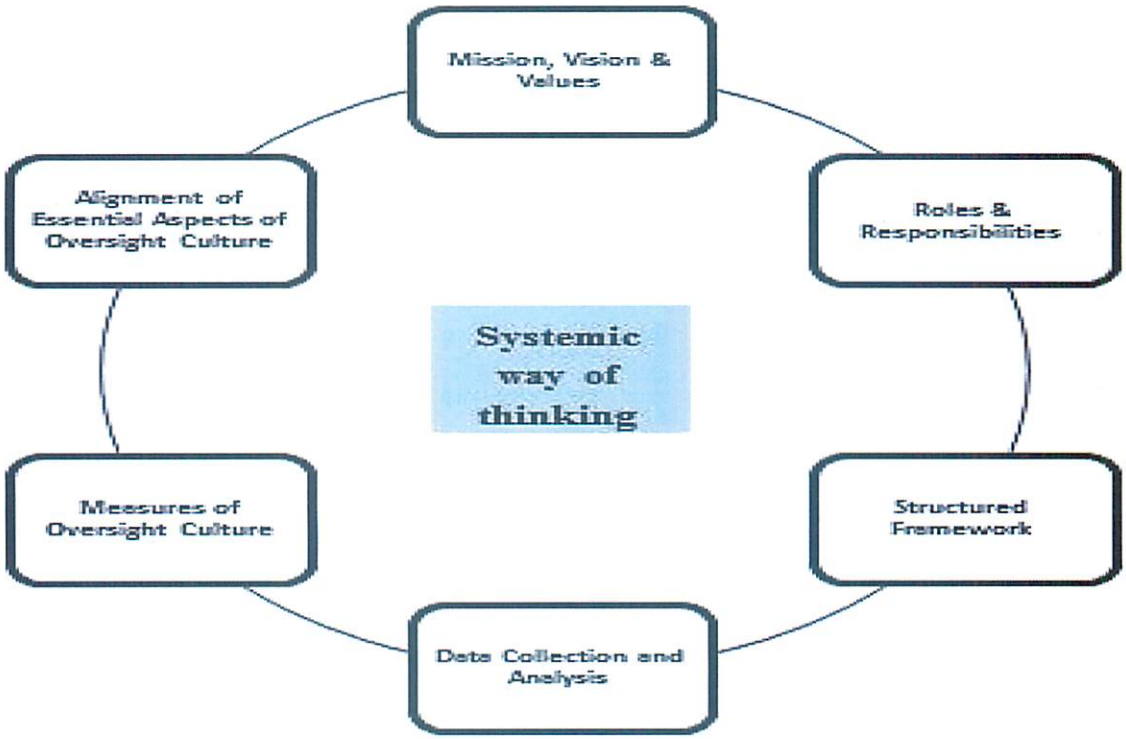
- In addition to enforcing safety requirements and regulations, the oversight organization's conduct and interactions should positively influence the operator's culture

B. Reflective Model of Oversight Excellence – Used to Develop Objectives and Lines of Inquiry

Oversight Excellence

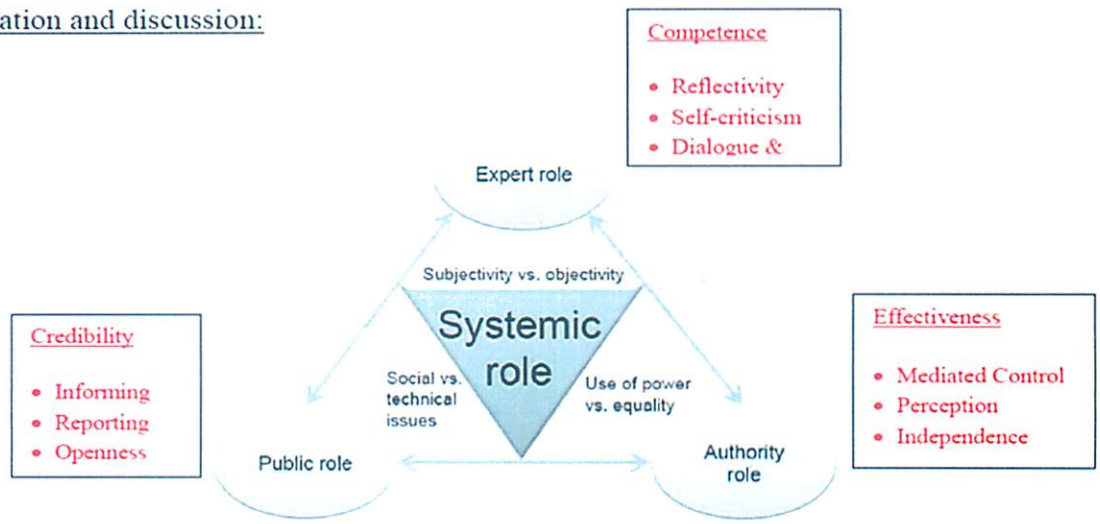
There is no single formula for achieving oversight excellence. Although excellent oversight organizations will apply different intervention strategies in different circumstances, there are nevertheless numerous signposts that can steer all overseers towards the goal of oversight excellence. These signposts include: invoking different strategies to engage effectively with different circumstances; facilitating, catalyzing and acquiring the participation of second and third parties for supplemental perspectives; and constantly self-evaluating, learning and adapting their approach. (*Adapted from Gunningham "Compliance, Enforcement, and Regulatory Excellence"*)

For purposes of this effectiveness review Oversight Excellence may be understood as follows: "The Oversight Culture enables reasonable assurance that the operator is performing work safely and securely consistent with contract provisions and federal requirements, encourages ongoing reflection within the Oversight and Contractor organizations to promote innovation and continuous improvement, and establishes a respectful environment in which competence, credibility and effectiveness are the hallmarks of oversight professionalism."



A systematic way of thinking should be taken in conducting oversight activities:

Illustration and discussion:



- *Authority role:* In the authority role the oversight framework is specified including requirements of the framework and oversight staff (aka assessors) evaluate their fulfilment. In this role, it is of central importance that oversight professionals master the use of rules and procedures as a means of exercising their responsibilities. Recognizing that the rules and procedures per se must be understood in the context of the situation being evaluated, they must be used as an indirect means to discern the meaningfulness of the situation. In addition, assessors must perceive and evaluate circumstances outside of the regulatory framework. They must develop tools, such as indicators, inspection plans, etc., for the purpose of monitoring the operation of the nuclear installation indirectly and based on sample observations. Finally, the principle of independence requires that assessors be able to distinguish between the factual content of an expressed opinion and the person expressing the opinion. Actions by assessors must be founded on factual arguments. According to the published reference documents, the fulfilment of the requirements of this role is related to the *effectiveness* of oversight.

- *Expert role:* The expertise that assessors develop and apply in the expert role is essential, since the regulatory framework can never be comprehensive and cover all matters. Assessors therefore need to have extensive technical and methodological knowledge in their technical and supervisory field. In addition, work in the expert role places high demands on the professional ability of assessors to judge. They must be capable of reflecting in a systematic, deep manner about the subject of oversight, but also of self-critically scrutinizing their own thinking and their perception. They must have or develop the ability to perceive safety-relevant signals, even where these are not yet clearly (e.g. on the basis of the oversight framework) identifiable, in order ideally to still be able to intervene during the incubation period that might indicate performance drift. In addition, the capacity for dialogue and collaboration both within the oversight authority and with the supervised parties is indispensable in the expert role. The expertise establishes the *competence* of the oversight authority.

- *Public role:* The public role stems from the oversight authority's informational mandate visà-vis the public. Communication constitutes the key task in this role. In practice, it is essential that assessors have the ability to evaluate which information they are obligated to communicate in connection with reporting and where this obligation is limited for reasons of confidentiality or security. This requires that assessors make an independent evaluation of the situation. In so doing, the sense of proportionality must be preserved; i.e. the risk significance of the particular situation. The fulfilment of the requirements of open communication emanating from the public role promotes the *credibility* of the supervisory authority vis-à-vis various stakeholders.

Key aspects of oversight culture

- Oversight philosophy and practice: This aspect relates to the basic question of what good oversight is; for example, issues in connection with the oversight organization's responsibility, with its oversight strategy, and with its relationship to the supervised parties (contractors).
- Collaboration and communication within oversight organization: This aspect dealt with the issue of how collaboration takes place within the oversight organization in and between sections, departments, and hierarchical levels.
- Oversight role vs. public role: This aspect deals with the issue of the extent to which and the way in which the oversight role and the public role depend on and influence each other.