

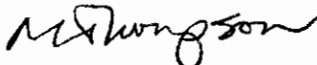


Department of Energy
National Nuclear Security Administration
Washington, DC 20585



AUG 24 2010

MEMORANDUM FOR NNSA SITE OFFICE MANAGERS
DIRECTOR, NNSA SERVICE CENTER

FROM: MICHAEL A. THOMPSON 
ASSISTANT DEPUTY ADMINISTRATOR FOR
INFRASTRUCTURE AND CONSTRUCTION
OFFICE OF DEFENSE PROGRAMS

SUBJECT: National Nuclear Security Administration Defense Programs and
Energy Facility Contractors Group Quality Assurance
(Improvement Project Task 2 (Quality Culture Implementation))

The National Nuclear Administration (NNSA) Office of Defense Programs (NA-10) and the Office of Nuclear Safety, Nuclear Operations, and Governance Reform (NA-17) has partnered with Energy Facility Contractors Group (EFCOG) Integrated Safety Management (ISM)/Quality Assurance (QA) Group in a Quality Assurance Improvement Project (QAIP) to address challenges and improve performance across its operations. This Focus Team was led by Anita Leivo of the Los Alamos Site Office (LASO) and Taunia Van Valkenburg of the Los Alamos National Laboratory. In order to address these challenges, the project team established its "Task" number two and Focus Team to establish a baseline for QA Implementation status in NNSA by the following methods.

- Conduct and Report Formalized Survey Results that Determine Current Status of Implementation of QA at NNSA sites (federal and contractor staff)
- Complete and Report on Special Task Team Effort, American Society of Mechanical Engineers (ASME) *Nuclear Quality Assurance (NQA-1) Edition Determination and Part II Applicability*.

Subsequently, the Focus Team Co-Leaders formed a team of QA professionals and led these efforts. The team completed these activities and provided the associated reports. The key findings of these studies included:

- There Were No Significant Deficiencies Identified
- All Sites Reported Implementation of QA Programs



- There Were Varying Degrees of Maturity at the Sites
- Some Local (Not Systemic) Site Specific Issues were Reported
- Both NQA-1 and Department of Energy Order 414.1C are Implemented (where appropriate)
- Oversight is Regularly Conducted on Design and Construction Activities
- Quality Assurance Personnel are Trained and Qualified
- Audit Results and Corrective Actions are Tracked and Trended

Copies of these studies and reports can be obtained from Anita Leivo of LASO.

The reports and their recommendations are not intended as direction. However, these results and recommendations have proven very helpful in determining the best path forward for further actions to improve Nuclear Quality Assurance throughout NA-10.

If you have any questions, you can contact Mr. Samuel Johnson at (202) 586-8854.

Attachment

cc w/attachments:

D. Nichols, NA-2.1

F. Russo, NA-3.6

S. Goodrum, NA-12

P. Niedzielski-Eichner, NA-14

C. Tucker, NA-15

J. McConnell, NA-17

M. Thompson, NA-16

P. Rhoads, NA-16

M. Mistretta, NA-16

S. Johnson, NA-16

G. Udent, NA-16

T. Van Ober, NA-261

A. Leivo, LASO

T. Van Valkenburg, EFCOG



**National Nuclear Security Administration
And
Energy Facility Contractors Group
Partnership
Quality Assurance Improvement Project Plan**

July 2009

**Focus Area #2 Summary Report
Team Initiative**

**Baseline of Current Quality Assurance
Culture, Implementation, Practices
And
Opportunities for Improvement**

DISCLAIMER

While this Summary Report is based upon informed opinions and evaluations of National Nuclear Security Administration and Energy Facility Contractors Group quality professionals as well as studies performed by the Institute Nuclear Power Operations, International Atomic Energy Agency, the Nuclear Regulatory Commission, and other sources: 1) the sample size and stratification; 2) the specific mission of each Site, 3) the resources available, and 4) other factors may influence the conclusions that can be reached.

The surveys and evaluations performed by the Focus Area #2 Team, however, can provide an informed and professional basis for selecting areas that are perceived to be Opportunities for Improvement which may enhance quality performance across the Nuclear Security Complex.

Baseline of Current Quality Assurance Culture, Implementation, Practices And Opportunities for Improvement

Executive Summary:

In late 2008 the National Nuclear Security Administration (NNSA) Office of Facilities, Infrastructure, Acquisition, and Operations, NA172, and members of the Energy Facility Contractor Group (EFCOG) agreed to develop a formal Quality Assurance Improvement Plan (QAIP) with the stated purpose of improving the effectiveness of Quality Assurance and reinforcing the culture necessary to improve work planning and performance with the NA-10 organization. Two Focus areas were identified for initial emphasis and priority.

This report, related to Focus Area #2, Baseline the Current DP QA Practices, Issues, and Quality Culture, describes the activities and results, as well as summarizes and reports results of a Nuclear Quality Culture Survey and a Survey of Quality Assurance Program Implementation, Quality Practices and Opportunities for Improvement.

The primary tasks for Focus Team #2 were for the purpose of :

- Defining quality assurance as a management system tool
- Defining what “culture” means
- Defining what “nuclear culture” means
- Identifying the input to achieving positive quality assurance culture
- Defining the elements of a nuclear culture;
- Evaluating the Quality Assurance culture and Quality Assurance Implementation in place at each of the eight NNSA sites

Participants were the Quality Assurance Managers or their representatives for both the Federal and contractor personnel from the following sites: Kansas City Plant, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Nevada Test Site, Oak Ridge Y-12 Plant, Pantex Plant, Sandia National Laboratories, and Savannah River Site. Collaborative inputs were solicited from each of these representatives.

The results of this effort identify potential opportunities for enhancing quality across the Nuclear Security Complex and also provide insight into specific Site input regarding most important topics and apparent causes.

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

Purpose:

The purpose of the team was to identify opportunities to enhance the effectiveness of Quality Assurance Programs already in place and, thereby, improve the safety, reliability of human performance, and the quality of work and to share those strategies and approaches that have proven to be of benefit and to avoid those that have not been beneficial,

Focus Area #2 activities and results provided to the NNSA/EFCOG Quality Assurance Improvement Project Plan Executive Committee and include:

- a. A baseline of the identification of the version of the Quality Standard and version (e.g., NQA-1, DOE Order 414.1C, and QC-1); Site QAP content, quality practices, top issues, and status for each NNSA site; and Points of Contact (Federal and Contractor) supporting the Focus #2 Team;
- b. A baseline identification of the Sites' most important quality issues and apparent causes, as provided;
- c. A baseline of information documenting an integrated assessment of the current quality culture at each NNSA site and a synopsis of the NNSA sites in aggregate; and
- d. A report of the results of a baseline culture and implementation survey completed by the NNSA sites.

Scope:

The Quality Improvement effort is inclusive of activities being conducted at the NNSA Sites (Kansas City, Livermore, Los Alamos, Nevada Test Site, Pantex, Sandia National Laboratories, Savannah River, and Oak Ridge Y-12) and represents an evaluation of the current baseline relative to quality culture, definition, quality practices, quality issues, implementation status, and opportunities for future improvements.

Background:

The joint NNSA/EFCOG Defense Program Sites Quality Assurance Improvement Plan (QAIP) identifies Focus Area #2 as "Baselining the Current DP QA Practices, Issues and Quality Culture". To address this area the Focus Area #2 Team laid out milestones to gather information and data related to the initiative.

The Team was led by Anita Leivo (NNSA LASO Office of Quality Assurance Manager), Taunia Wilde (CMRR Quality Assurance Manager) and Marlin Horseman, Energy Solutions, CMRR, LANL. Representatives (both Federal and Contractor) from each of the Defense Program Sites were identified as Team members and Points of Contact to support the initiative.

Two surveys, "NNSA DP Sites Cultural Survey" and Quality Assurance Implementation and Issues Survey, were developed using published studies and a provided format from the Office of Environmental Management. Utilization of the format for one survey issued by the Office of Environmental Management will facilitate a corporate NNSA response to an anticipated Department of Energy request for similar data. Inputs were received from 15 of 16 of the NNSA Site representatives; which were subsequently evaluated and collated.

PART I
Program Quality Culture Overview

Overall, the respondents from the various Sites believe that, in most areas evaluated, their Site and organization are above average and are fully supported by management.

Areas identified as Opportunities for Improvement are as indicated below:

1) Improve general communications and organizational interfaces at all levels

- Between Federal and Contractor Organizations
- Between Quality Assurance Organizations
- Between Technical Organizations
- Within Internal Organization

2) Improve Effective Long-Term Problem Resolutions

- Improve the Acceptance of Problem Ownership
- Improve Corrective Actions to Preclude Recurrence
- Improve the Tracking, Timeliness, and Trending of Corrective Actions

3) Improve Processes and Procedures – Specific Individual Suggestions

- Acceptance of NQA-1 as the Quality Consensus Standard
- Improve the Integration of ISMS, Quality Assurance, and Safety Cultures
- Improve Work Simplification
- Improve the Implementation and Effectiveness of the Improvement Programs

4) See Individual Comments Below – Not Provided in a Preferential/Prioritization Order

- Encourage more time in the field.
- Fill Vacancies ASAP. Will help morale and provide more resources.
- Focus on fixing NNSA/HQ and the SC. That's where most of the significant problems are.
- Line management should be held accountable and responsible for implementation of nuclear safety, not just scope, cost, and schedule. If external assessments (e.g., CDNS) identify non-conformances to established requirements that were adopted at the behest of line organizations, then these same organizations should be implementing the corrective actions to resolve these findings.
- As an organization, each Site is responsible for safe and effective operations, but the managers have stove-piped roles and responsibilities that are not conducive to the Site goal. Costs, scope, and schedule are not the only attributes that determine a site's success. All staff should understand

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

that continued operations at the Site is important for national security, but that other important values or attributes (i.e., nuclear safety) must be satisfied.

- Regular “safety first” FEDCASTs to highlight safety issues, procedures, priorities to employees on a continuing basis.
- Establish NNSA resource strategy and training for future missions. Develop effective oversight process and flow-down of requirements.
- Establish effective NNSA Quality Assurance Program.
- Clearly require NQA-1 for nuclear and high hazard facilities and QC-1 for all weapon related work.
- Emphasize the compliance/commitment to Quality Assurance to the level of Safety compliance. They should be of equal importance to senior management.
- Add compliance to the safety and quality programs to the senior management objectives.
- Communicate on a regular basis the concepts of nuclear safety culture (which are applicable to safety culture in general without the nuclear part).
- We are beginning to do this – hold organizations accountable at a high level (our Operations Excellence Council) for the identification and correction of issues. We need to be reviewing our significance level 1 and 2 issues in our issues tracking system at our OEC on a regular basis for timeliness and quality of completion. We have the data; we just do not spend enough time holding line organizations accountable for timely and appropriate corrective actions.
- Communicate the importance of integrating ISMS, Quality Assurance, and Safety Culture to develop an organizational learning philosophy. Identifying issues is the appropriate thing to do followed by thorough corrective action.
- FYI – re Davis Besse – a good definition for nuclear safety culture: An organization’s values and behaviors that are modeled by its leaders and implemented by its members to make nuclear safety the overriding priority.
- Continue with the implementation of ISMS principles – integrating work with ES&H/QA/Security functions
- Need a simple straight forward approach that can be effective over the next several years to establish a solid quality culture within all sites and areas.
- Develop a guide to the graded approach for implementation of NQA-1 requirements.
- Sponsor a project to develop and deliver NQA-1 training in several levels, including Graded Approach
- Need improved communication between QA managers at all sites, including contractors and NNSA to truly share experiences and problems.
- First and foremost implement NQA-1 as the consensus standard for the NNSA sites and especially for the current construction projects.

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

Results from Culture Analysis Part III- Analysis of Responses and Conclusion

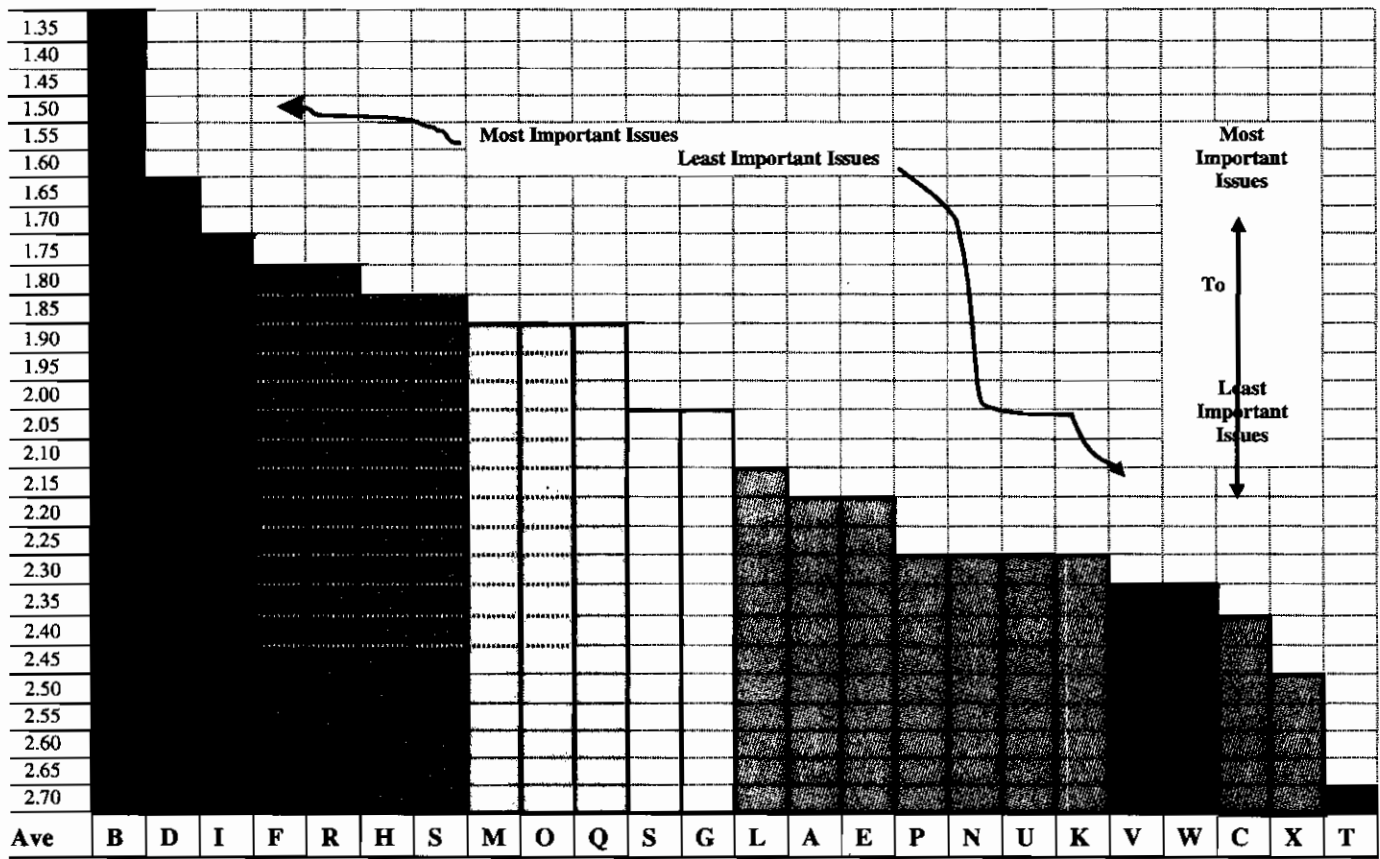
Rank the following potential problem areas as 1, 2, or 3: (#1 – Most Important Issue; #2 – Important Issue; #3 One of least Important Issues)

11 Respondents (Lowest Numbers are the Most Important – All Sites):

Red – Most Important Issues; Green – Least Important Issues

- | | | | |
|----------------|--|----------------|---|
| A. 2.22 | Morale within Organization | N. 2.28 | Lessons learned |
| B. 1.34 | Interface between organizations | O. 1.91 | Long-term problem solutions |
| C. 2.48 | Vision, values, expectations | P. 2.28 | Effective planning processes |
| D. 1.66 | Communications | Q. 1.91 | Processes |
| E. 2.22 | Organizational stability | R. 1.78 | Procedures |
| F. 1.78 | Availability of resources | S. 1.88 | Questioning attitude |
| G. 2.09 | Participatory management | T 2.68 | Employee concerns |
| H. 1.88 | Accountability | U. 2.31 | Appropriate behaviors |
| I. 1.77 | Problem ownership | V. 2.31 | Teamwork |
| J. 2.07 | Willingness to live with problems | W. 2.31 | Hidden cultures |
| K. 2.31 | Effective key performance indicators | X. 2.33 | Trust, care, and concern for Staff |
| L. 2.16 | Effective oversight processes | | |
| M. 1.91 | Repetitive issues and problems | | |

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors



Most Important Issues to Least Important Issues – Address Left Column (B) First

PART II

Quality Implementation, Practices, and Opportunities for Improvement

Below is a general overview of current status and reflects what is working well at the sites

- Sites are required to meet as applicable, the quality requirements of 10 CFR 830 Subpart A, DOE Order 414.1C, NQA-1, ISO-9001-2000, and/or QC-1 Revision 10. The bases for Site Quality Assurance Programs vary, but are generally NQA-1 or QC-1 with the exception of Kansas City Plant due to the type of work performed at that facility.
- With minor exceptions, the Sites feel their Quality Assurance Program covers both NQA-1 and DOE Order 414.1 Criteria.
- Without exception, respondents indicate that the Sites track and trend audit results. Different software is employed at the sites to perform those tracking and trending activities.
- Without exception, respondents indicate that they schedule and perform Management Assessments and are being conducted in accordance with those schedules.
- All Sites indicate they have developed and are implementing a Suspect and Counterfeit Items process and a process for controlling Safety Software.
- Without exception, all Sites indicate they perform general oversight to include oversight of their Design and Construction Contractors when such work is being performed.
- Without exception, Site design and construction contractors are reported by the Sites to be trained, or are in the process of training, their personnel performing quality-affecting activities, if applicable.
- Many of the on-Site Quality Control personnel are trained and/or qualified under the NNSA Technical Qualification program.
- As a variance from the Department of Energy EM Quality Assurance Implementation survey, all Sites were requested to and provided comments regarding most important site quality issues and the cause of the issues. Many recommendations, issues and their apparent causes.

On the other hand, the Sites identified Site Specific comments that may represent Opportunities for Improvement:

- **Issue:** Integration of functions and actions by the contractor. **Cause:** Historical stove-pipe style of organization that drives contractor culture.
- **Issue:** Ability of Site Office QA to oversee all activities. **Cause:** Inadequate staff.
- **Issue:** Lack of a single, integrated QA system within NNSA. **Cause:** Lack of a single QA program in NNSA
- **Issue:** NNSA requirements management. **Cause:** NNSA promulgates requirements through a variety of controlled and uncontrolled processes.
- **Issue:** Quality issues from WR product. **Cause:** WR production begins while product is still in development.

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- **Issue:** Implementation of QA Program. **Cause:** Relatively new Institutional QA Program and Implementing Procedures.
- **Issue:** Integration of all the Quality Requirements. **Cause:** Multitude of laws, orders, requirements and the integration to transcend “must do” to get to best practices/commercial practices.
- **Issue:** Separation of “what” from “how”. **Cause:** Temptation to go beyond specific requirements and expect implementation based on preferences.
- **Issue:** Improve the institutional processes for how the Site prepares reviews, approves, issues, uses, controls, and revises institutional governing documents. **Cause:** Contract transition changed the processes for institutional documents and records.
- **Issue:** Improving the graded approach process. **Cause:** The description of the graded approach processes can be improved to better define the effective application of QA requirements.
- **Issue:** Proper interpretation of Requirements between sites. **Cause:** No clear ownership of TBP's and no POC to make final interpretation. This has led to many problems between Labs and the Site. Issues include: 1) interpretations of proper Engineering Release; 2) what conditions should be included in OERs and do these conditions affect quality; and 3) proper handling of IMRs, URs, and Reverse URs.
- **Issue:** RMI Process. **Cause:** The D&P Manual and the WQAP (Fed Documents) tell WHAT needs to be done. The TBP's are contractor interagency documents that tell HOW the WHAT will be done. Requirements Modernization Initiative (RMI) will combine these. In effect, it will take the WHAT Requirements out of government hands and allow the Contractor Interagency group to combine the HOW & WHAT in their own document.
- **Issue:** AF&Fs. **Cause:** There have numerous quality issues with AF&Fs. Many have been returned to the manufacturer, but some here are still suspect. They may be acceptable, but it is not yet clear.
- **Issue:** Difficulty of Establishing and Maintaining a QA Program useable by and supportive of all organizations in a multi-program National Laboratory. **Cause:** The existence of multiple customers/funding sources who impose QA requirements from a variety of Standards.
- **Issue:** Full implementation of NQA-1 by the Site. **Cause:** NQA-1 has not been fully implemented into procedures at the worker level.
- **Issue:** Improvement in Calibration Program. **Cause:** Improvement in the scheduling and execution process between the user and the Site.
- **Issue:** Development of new Metrics. **Cause:** Shop floor Transformation Projects, Cost of Nonconformance, Certified Part Summary.
- **Issue:** Improvement in QA Purchasing Program. **Cause:** Inadequacies in procedures, roles and responsibilities, graded approach, supplier evaluation, Commercial grade dedications and procurement training.
- **Issue:** Develop and implement a paperless certification process for Build Books. **Cause:** Build Books are all paper copies.

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- **Issue:** Develop and implement digital radiography system. **Cause:** Dimensional inspection currently uses inefficient photographic film for inspections of parts and pieces.
- **Issue:** Site Reorganization. **Cause:** Realign the QA organization so that the Quality Manager is directly reporting to either the Site Manager or the Dep. Manager per DOE 414.1X.
- **Issue:** Nuclear safety system construction/modification, Quality Control inspections/records. **Cause:** High turnover and reduced staff causing impact on performance and documentation.
- **Issue:** Receipt and inspection documentation. **Cause:** High turnover and reduced staff causing impact on performance and documentation.
- **Issue:** Procurement integration of engineering specifications. **Cause:** Culture and process implementation.

Los Alamos LASO	Anita Leivo NNSA, LASO QAM	Doug Wedman QAM, LANL	10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2000 ISO 9001-2000 QC-1, Rev 10	Yes, NQA-1, 2000 and QC-1 WQAP	Covers NQA-1, 2000 and DOE O 414.1C	None	QA Personnel LASO Staff - completed Institutional QA and Weapons QA	Yes Yes
Kansas City KCSO	Name: Cathy Karney Phone: 816-997-5691 E-mail: catherine.karney@nnsa.doe.gov		The KCSO QAP is encumbered within the overall KCSO Business Management System, which was developed to comply with both DOE 414.1C and ISO 9001. QAP Basis: ISO 9001	KCSO Yes, QAP Basis: ISO 9001-2004	KCSO - Safety Software QA and S/CI are not applicable at the Kansas City Plant (non-nuclear site). The rest are covered	None	KCSO not trained on QAP KCSO not included in formal Technical Qual Program, but 1 person qualified to DOE STD-1175; other CO and Proj Mgmt KCSO QAP does not cover M&O training	Yes, KCSO Yes, Contractor
SRS,		Charles Mackie, QAM 803-208-0472 Charles.mackie@srs.gov	DOE O 226.1A; 10 CFR 830, Subpart A; QC-1, ANSI/ASQ E4, ASME NQA-1-2000, ISO 9002	DOE O 226.1A; 10 CFR 830, Subpart A; QC-1	SRSO - N/A Docs exist outside SRSO QAP that covers these items. Yes, Contractor - Covers NQA-1, 2000 and DOE O 414.1C	SRSO - N/A Contractor Covers LL	SRSO - Yes on QAP Yes, 3 Feds to DOE STD-1150, and/or 1172 Yes, Contractor	SRSO Yes Contractor ???
SRSO	Name: Dan Zweifel Phone: 803-208-1023 Daniel.zweifel@mnsa.srs.gov							
NTS,		Michael Eshleman, QAM	10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2000 ISO 9001-2008 QC-1, Rev 10	Yes, Basis ISO 9001, 2000 QC-1, Rev 10 NQA-1, 2008	Covers NQA-1, 2008 and DOE O 414.1C	None None	NSO, ??? Contractor Yes	NSO Contractor, Yes Contractor Yes
NSO	Mike Marelli							

SUMMARY RESULTS

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Livermore				10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2000 ISO 9001-2000 QC-1, Rev 10	Yes Basis QC-1	Includes all but Safety Software and S/CI	???	Yes, 17 Feds Qualified to DOE STD-1150, 1172, 1175, and/or 1151	Yes, LSO Contractor, No??? "There is no requirement for all contractor personnel to be trained on the LLNL, QAP
LSO	Adeliza Cordis @ Livermore Site Office								
Pantex,		James Stevens, QAM		10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2000 ISO 9001-2000 QC-1, Rev 10 10 CFR 71 Sub H	Yes Basis ISO 9001, 2000 QC-1, Rev 10 NQA-1, 2000	Covers NQA-1, 2000 and DOE O 414.1C	None None	PXSO and Contractor: Yes Yes	PXSO and Contractor: Yes Yes
PXSO	Brian Jones, AMAO Gregory Baker, QA Supervisor								
Sandia,		Barbara A. Boyle QAM		10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2000	Yes 10 CFR 830 Sub A	Oversight	None	No, Mgmt has not felt a need to do so	Yes Yes
SSO	Ron Rodger								
Y-12,		Andrea K. Zava, QAM		10 CFR 830 Sub A DOE Order 414.1C NQA-1, 2004 (Future 2008) ISO 9001-2000 QC-1, Rev 10	Yes NQA-1, 2000	Covers NQA-1, 2004 and DOE O 414.1C	None	Yes, Feds Yes, Contractors	Yes, except SQA, Identification, Control and Status of Items, Insp. & Test, and Procurement. Need improvement Yes, Contractor
YSO Oak Ridge	Kenneth Guay								

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Los Alamos LASO	08 Completed 09 On Schedule Yes	Yes -LIMTS Tracks Institutional; CMRR Tracks CARs and NCRs	Yes,	Yes	Yes
Kansas City KCSO	Yes, KCSO-Semi-annual management reviews Yes ???, Contractor	Yes KCSO ???, Contractor	N/A - KCSO	N/A - KCSO	N/A - KCSO
SRS	N/A - done by non-QA organizations	Yes SRSO, Yes Contractor Pegasus Information Mgmt System used to track actions	SRSO - Yes Contractor - ???	SRSO - Yes Contractor - ???	SRSO - Yes Contractor - ???
SRSO	Yes Contractor				
NTS	Yes	NSO ???	Yes	Yes	Yes
NSO	Yes	Contractor, Yes			
Livermore	Yes	Yes Track and Trend	Yes LSO, Yes Contractor	LSO:	Yes
LSO	Yes	Contractor Track and Trend Audit Results???	Pegasus Information Mgmt System used to track actions	No, but was assessed in FY 07	Yes
Pantex					
PXSO	PXSO and Contractor: Yes Yes	PXSO, Yes - The current QAP points to PXSO P 226.1-1. With updating to Pegasus and now e-Pegasus, this section of the QAP is in need of revision. Contractor, Yes	Yes,	Yes	Yes
Sandia SSO	Yes, SSO Low-risk findings tracked in the Lab Enterprise Self Assessment High or medium Risk are tracked in SNL C/A Tracking System	Yes, SSO Low-risk findings tracked in the Lab Enterprise Self Assess High or med. Risk are tracked in SNL C/A Tracking System	Yes, SSO Yes, Contractors SSO does some hardware, software, and Systems design.. But Design and Construction of Facilities are Subcontracted Design Subs will be required to have effective QA Program and Construction Contractors in 09	Yes, SSO Yes, Contractors In 2008 SSO began assessing the Design Contractor. QAP Projects over \$250K are reviewed by Architect firm and SNL to ensure it meets Code and other Requirements	Yes, SSO+++ Yes, Contractors When construction Contractors implement their formal QAP this year, they will be required to train their staff accordingly.

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Y-12, YSO Oak Ridge	Yes Yes	Yes Yes	Yes Yes	Yes Yes	N/A YSO Yes, Contractors
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QUALITY ASSURANCE IMPLEMENTATION, PRACTICES AND ISSUES SURVEY

Please provide the following information regarding the general requirements of the DOE QA Order:

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
<p>Site Office or Contractor Name: Does your HQ Staff, Support Office, or Contractor have an approved written QA Program (QAP) per DOE O 414.1C? (Yes/No) Have a Quality Assurance Implementation Plan (QIP)? (Yes/No)</p>				
<p>Who was the approving official for this QAP (title/position)?</p>	Name of Approving Official:			
<p>If you have a QA Manager, provide the name, telephone number, and email address of the QA Manager.</p>	Name: Phone: E-mail:			
<p>Identify any other basis for the QAP beyond DOE O 414.1C, (e.g., NQA-1, QC-1, or NRC regulations).</p>	QAP Basis:			
<p>Identify implementing standards used (e.g., NQA-1, ISO 9001, ANSI ASQ Z1.13) (Please include version- e.g., NQA-1, 2004)</p>	Other Standards Used:			
<p>Comments</p>	<p>I/E = Implementation and/or Effectiveness</p> <p>Rating Legend</p> <p>1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived</p>			

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I-2 Quality Assurance Program [General Requirements, Criterion 1]

For each HQ Staff, Support Office, or Contractor provide information regarding approved procedures and any procedures under development that provide QA Program controls.

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
<p>Site Office or Contractor Name:</p> <p>Approved QA Procedures (Check the topical areas for procedures that currently exist in your organization as applicable.)</p> <p><input type="checkbox"/> Management Assessment <input type="checkbox"/> Independent Assessment</p> <p><input type="checkbox"/> Oversight <input type="checkbox"/> Lessons Learned</p> <p><input type="checkbox"/> Safety Software QA <input type="checkbox"/> Corrective Action Tracking</p> <p><input type="checkbox"/> Corrective Action Effectiveness <input type="checkbox"/> Doc/Records Control</p> <p><input type="checkbox"/> Training <input type="checkbox"/> Suspect/Counterfeit Items</p>				
<p>Procedures under development as applicable.</p> <p><input type="checkbox"/> Management Assessment <input type="checkbox"/> Independent Assessment</p> <p><input type="checkbox"/> Oversight <input type="checkbox"/> Lessons Learned</p> <p><input type="checkbox"/> Safety Software QA <input type="checkbox"/> Corrective Action Tracking</p> <p><input type="checkbox"/> Corrective Action Effectiveness <input type="checkbox"/> Doc/Records Control</p> <p><input type="checkbox"/> Training <input type="checkbox"/> Suspect/Counterfeit Items</p>				
<p>Comments</p>	<p>I/E = Implementation and/or Effectiveness</p> <p>Rating Legend</p> <p>1 – Significant I/E issues are present</p> <p>2 – Improvements are needed</p> <p>3 – I/E is minimally compliant</p> <p>4 – Few, if any I/E issues occur</p> <p>5 – Exceptional I/E. Excellence is being archived</p>			

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

II-1 Training & Qualifications [General Requirements, Criterion 2]

Please provide the following information regarding qualification (TQP or other qualification programs) of Federal staff personnel who provide the necessary oversight of QA and SQA activities.

Does the QAP establish or describe.....	Yes, No or N/A	Number of Federal Staff Assigned	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
Do you have Federal staff assigned the responsibility to ensure implementation of QA/Oversight requirements? (Yes/No)				
Please indicate the number of Federal staff personnel who have completed their qualification to each of the following standards:				
DOE STD-1150, Quality Assurance Functional Area Qualification Std				
DOE STD-1172, Safety SQA Functional Area Qualification Standard				
DOE STD-1175, Sr. Tech. Safety Manager Functional Area Qual. Std				
DOE STD-1151, Facility Rep Safety SQA Functional Area Qual. Std				
Other Qualification,				
If OTHER, indicate which standard(s) and how many staff members have completed their qualification.				
Comments				I/E = Implementation and/or Effectiveness Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4.– Few, if any I/E issues occur 5– Exceptional I/E. Excellence is being archived

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

II-2 Training & Qualifications [General Requirements, Criterion 2]

Does your organization's QAP require that Federal Staff be trained on the implementation of the QAP? Has your Federal staff been trained to your QAP? Does primary Contractor staff receive training on their QAP? If no, please provide explanation.

Does the QAP establish or describe.....	Yes, No or N/A	Number of Federal Staff Assigned	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
Does the QAP require Fed staff to be trained on QAP? (Yes/No)				
Have your Federal staff personnel been trained to your QAP? (Yes/No)				
Has the Primary Contractor personnel been trained to their QAP? (Yes/No)				
If No, please provide explanation				
Comments				<p>I/E = Implementation and/or Effectiveness Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived</p>

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

III-1 Assessment and Improvement [Requirements, Criterion 3, 9, 10]

Please provide the following information regarding your Assessment and Improvement processes:

Does the QAP establish or describe.....	Yes, No or N/A	Who conducted the Assessment	Rating 1-5	Corrective Actions Developed? (Yes?No)
Site Office or Contractor Name:				
Did you complete your HQ Staff, Support Office management (self) or Contractor assessments scheduled for FY 2008? (Yes/No)				
Are you on track to complete your Staff, Support Office management or Contractor assessments scheduled for FY 2009? (Yes/No)				
Were there any independent assessments conducted or planned on the HQ Staff, Support Office, or Contractor activities for FY 2008 and FY 2009 (e.g., IG, GAO, HS assessments, 3 rd party assessments, etc)? (Yes/No),	2008			
	2009			
Comments				I/E = Implementation and/or Effectiveness Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

III-2 Assessment and Improvement [Criteria 9, 10]

Please provide the following information regarding your assessment and improvement processes:

Site Office or Contractor Name:		
Complete FY08 Management Assessments?	On Track for FY09 Assessments?	
Yes/No	Yes/No	<i>If no, please explain, If Yes identify Issues</i>
<p>Comments</p> <p><i>I/E = Implementation and/or Effectiveness</i></p> <p>Rating Legend</p> <p>1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived</p>		

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

III-3 Assessment and Improvement [Criteria 3, 9, 10]

Please provide the following information regarding your assessment and improvement processes:

Site Office or Contractor Name:				
Were there any independent assessments conducted or planned on the HQ Staff, Support Office, or Contractor activities for FY 2008 and FY 2009 (e.g., IG, GAO, HS-60 assessments, 3 rd party assessments, etc.)? (Yes/No)				
Name of HQ Staff, Support Office, or Contractor	Assessment conducted?		If Yes, who conducted the assessment?	Corrective Actions Developed? Yes/No; if No, please explain.
	FY 2008	FY 2009		
Comments				
/E = Implementation and/or Effectiveness				
Rating Legend				
1 – Significant I/E issues are present				
2 – Improvements are needed				
3 – I/E is minimally compliant				
4.– Few, if any I/E issues occur				
5– Exceptional I/E. Excellence is being archived				

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

III-4 Assessment and Improvement [Criteria 3, 9, 10]

Please provide the following information regarding your assessment and improvement processes:

Site Office or Contractor Name:				
Were there any independent assessments conducted or planned on the HQ Staff, Support Office, or Contractor activities for FY 2008 and FY 2009 (e.g., IG, GAO, HS-60 assessments, 3 rd party assessments, etc.)? (Yes/No)				
Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
Does the QAP establish Independent Assessment and Management Assessment processes with approved implementation schedules to measure the effectiveness of QA policy and program implementation in your organization? (Yes/No)				
Does the QAP establish a process to identify and track actions resulting from assessments and ensure necessary improvements are achieved (i.e., a feedback and improvement or corrective action process)? (Yes/No) If yes, identify system/process; If no, please explain				
Comments				
I/E = Implementation and/or Effectiveness Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived				

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

IV. Design and Construction

Please provide the following information regarding your Design and Construction processes:

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
Do your contractors have a process in place to ensure the achievement of quality in design and construction? (Yes/No)				
During FY 2008, did your organization conduct oversight/assessment activities to evaluate the effectiveness of the processes in place to assure quality in design and construction? (Yes/No)				
Are contractor design and engineering staff trained on their applicable work processes which implement quality? (Yes/No)				
Is there contractor staff engaged in onsite quality control of construction and if so, how many staff members are QA-qualified? (Yes/No) If yes, how many?				
<p>Comments</p> <p style="text-align: right;">Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4.– Few, if any I/E issues occur 5– Exceptional I/E. Excellence is being archived I/E = Implementation and/or Effectiveness</p>				

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

V-1. Implementation/Effectiveness Baseline related to other DOE O 414.1C Requirements

This section must be completed for each DP Site Office and/or Contractor. Please complete the following information:

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
An approved set of documented instructions, procedures, etc. that prescribe processes, specify requirements, or establish design for your work activities? <i>[Criterion 4]</i>				
A documents/records management system and/or a documented process in place to specify, prepare, review, approve, and maintain records? <i>[Criterion 4]</i>				
A process to ensure work is performed consistent with technical standards, administrative controls, and hazard controls adopted to meet regulatory or contract requirements using approved instructions, procedures, etc. <i>[Criterion 5]</i>				
A documented process for defining, performing, validating, approving and controlling design activities? <i>[Criterion 6]</i>				
A documented process to ensure procured items and services meet requirements; for specifying products and services, and evaluating and selecting vendors, and ensuring that services and products continue to meet requirements? <i>[Criterion 7]</i>				
A documented process to inspect and test items, services, and processes to ensure that they meet established acceptance and performance criteria? <i>[Criterion 8]</i>				
A DOE Corrective Action Management Program in place and in use? <i>[Req. 4.a.(4)]</i>				
Comments				Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4.– Few, if any I/E issues occur 5– Exceptional I/E. Excellence is being archived I/E = Implementation and/or Effectiveness

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

V-2 Implementation/Effectiveness Baseline related to other DOE O 414.1C Attachment 3, Suspect and Defective Items Requirements
 This section must be completed for each DP Site Office and/or Contractor. Please complete the following information:

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
Has a suspect/Counterfeit process been developed and implemented by the Contractor? (Yes/No)				
If a process has been established, indicate which of the following areas are included in the process:				
Included in the organization's QAP? (Yes/No)				
The process Includes the Identification Process? (Yes/No)				
The process Includes an Analysis Process? (Yes/No)				
The process Includes the Removal Process? (Yes/No)				
The process Includes the Prevention Process? (Yes/No)				
The process Includes Identification of the Federal POC? (Yes/No)				
Comments	<p>Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4.– Few, if any I/E issues occur 5– Exceptional I/E. Excellence is being archived I/E = Implementation and/or Effectiveness</p>			

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

V-3 Implementation/Effectiveness Baseline related to other DOE O 414.1C Attachment 5, Safety Software Requirements

This section must be completed for each DP Site Office and/or Contractor. Please complete the following information:

Does the QAP establish or describe.....	Yes, No or N/A	If No, when do you plan to have it in place	Rating 1-5	If N/A, Rationale
Site Office or Contractor Name:				
Has a Safety Software process been developed and implemented by the Contractor? (Yes/No)				
If a process has been established, indicate which of the following areas are included in the process:				
Has the process been included in the organization's QAP? (Yes/No)				
Have Contractor safety software grading levels been submitted in the Contractor QAP and approved by DOE? (Yes/No)				
Has a Safety Software Inventory been identified, documented, and maintained by the Contractor as required by DOE O 414.1C? (Yes/No)				
Has the Inventory Document been reviewed by DOE? (Yes/No)				
<p>Comments</p> <p style="text-align: right;">Rating Legend 1 – Significant I/E issues are present 2 – Improvements are needed 3 – I/E is minimally compliant 4 – Few, if any I/E issues occur 5 – Exceptional I/E. Excellence is being archived I/E = Implementation and/or Effectiveness</p>				

NNSA DP Sites Focus Team #2, Summary Report, July 2009 – Feds and Contractors

VI Quality Issues Please complete this table to identify what you feel are the important Site Issues (including Contractors):

Site Office or Contractor Name:	
Most Important Site Quality Issues	A Description or Cause of Issue
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
Comments	

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey Form

General

1. There is a comprehensive, well-implemented safety culture that provides the supporting infrastructure needed to ensure 1) high levels of achievement; 2) evidence of conservative decision-making by management; and 3) a defense-in-depth approach.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
2. Your organization emphasizes quality and safety over schedule and cost.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
3. There is little, if any, evidence of a "we or they" attitude between employees, organization, and management with the placing of blame.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
4. There is a healthy level of tension or stress within the organization.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
5. Clear mission, vision, values, standards and expectations have been communicated, understood, and they have been translated into action plans.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
6. People, in general, are happy and there is evidence of a good morale throughout the organization.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
7. Total quality concepts and Integrated Safety Management principles are practiced, with the aim of achieving excellence and safety in operations.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
8. The organization and personnel pay attention to details regarding any promised improvement programs and commitments made to the public, regulators, personnel, and senior management.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
9. The organization has strong organizational interfaces internally and externally: communications across interfaces are clear, understood, and timely to avoid things falling through the cracks.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

10. The organization has processes in place to 1) be aware of changing environmental conditions; 2) form a vision of where the organization needs to go; and 3) articulating the new vision.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

11. The organization establishes and maintains the operating principles and management expectations required to achieve high-performance.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Organizational Objectives

12. Individuals and management maintain 1) a questioning attitude; 2) expect the unexpected; 3) and provide good planning for contingencies and emergencies.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

13. Employees are involved in the formulation of goals and objectives; and decision-making processes.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Procedures and Processes

14. Design and licensing bases are maintained in accordance with a sound configuration management and control program.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

15. Procedures are upgraded in a timely manner and are being followed.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

16. There is an effective work simplification or a process improvement program to avoid ineffectiveness, needless complication, and duplication of effort.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

17. There are efficient and effective work control programs in use.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

18. There is an effective employee concerns program with management commitment being readily evident.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

Individuals

19. Emphasis is placed on organizational, management, and individual accountability, with authority given to match the responsibility.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
20. Individuals and groups within the organization are team players, accept ownership of problems, and understand and support the larger organization's objectives and issues.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Management

21. Management recognizes and rewards the required and appropriate behaviors or performance of individuals and groups.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
22. Senior management exhibits a commitment to high ethical standards and ethical leadership.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
23. There exists a sound management succession program for all key people at all levels.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
24. There are recognized heroes, leaders, and role models who lead by example.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
25. There is a lack of evidence that suggests excessive arrogance, complacency or isolationism within and between organizations,
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
26. Emphasis is placed on career planning and developing the skills and capabilities of the personnel.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
27. The employee turnover rate is low.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
28. High performance standards within the organization are communicated and are evident.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

29. Office politics are discouraged and are kept to a minimum.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
30. Management initiates efforts to avoid individual and organizational "burn out" from excessive overtime or excessive work load.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
31. The organization and methods for performing work activities are stable and effective.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
32. Organizational changes are carefully planned and sequenced to minimize disruptions to people and activities.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
33. Risk taking, not risk avoidance, is emphasized along with the acceptance of the responsibility and accountability.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
34. Emphasis is placed on improving communications in all directions, and controlling rumors and misinformation.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
35. There is a highly qualified, skilled, and effective management team with varied and pertinent experience.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
36. There is a lack of crisis management and being externally driven to do the right thing.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
37. External drivers are not needed in order to do the right thing.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
38. There is open, honest, and cooperative working relationship between the organization and the public, regulators, contractors, personnel, and senior management.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

39. Emphasis is placed on teamwork and working together to meet organizational objectives and program requirements.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
40. Job security and reward are based upon performance and results.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
41. Emphasis is placed on smart and effective work over busy work?
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
42. Emphasis is placed on participatory management concepts.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
43. Emphasis is placed on direct management involvement, management by walking around, and coaching with routine feedback provided to individuals on how to improve their performance.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
44. Management exhibits a consistency in communicating the appropriate philosophy for the organization until it is understood and implemented at all levels.
45. There is a lack of a hidden culture where leadership says one thing and does another.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
46. Leaders demonstrate genuine care and concern for people.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
47. There is trust between and among executives, managers, supervisors, and employees at all levels of the organization.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
48. There is a sound program for proactive problem identification and problem resolution implemented through prioritization and based upon quality and safety significance.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
49. There is an effective resolution, and root cause determination process in use that results in an effective corrective action program (CAP). The fully implemented CAP helps management to identify, document, track, and correct any quality or safety related deficiencies.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___
50. Organizations and individuals identify, report, and accept ownership for problems.
Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

51. Problems are fully resolved with few, if any, repetitive occurrences.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

52. There is a broad understanding throughout the organization of risks and staying below certain thresholds?

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

53. The organization and individuals are aware of the risks and hazards of non-safe actions.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

54. Industry experience, best practices, and consistent implementation of high standards are effectively used to improve and maintain quality and safety.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

55. Emphasis is placed on proactive, not reactive approaches to resolve issues

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

56. Attention is allotted to individual and organizational concerns, human relations, and conflict issues with efforts continuing until resolution is achieved.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

57. Decisions are based upon facts, as opposed to half-truths, rumors, and assumptions.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

58. The organization emphasizes long-term, solid solutions to problems over short-term, quick fixes.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

59. An effective problem-solving culture is evident, without a "kill the messenger" mentality or retaliation.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

Nuclear, Organizational, Safety, and Quality Survey

60. There is a culture that exhibits an unwillingness to live with problems, as indicated by the lack of a large task backlogs and excessive "work-arounds".

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Program Oversight

61. There is a process for effective oversight of the quality of items and activities, not only by the quality assurance and quality control organizations, but also by other oversight and line organizations.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

62. There are fully implemented and effective self-assessment and management-assessment programs.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

63. Effective metrics have been established for important organizational, safety, and quality activities: they are being tracked; communicated throughout the organization; and plans are in place and are being implemented to improve the activities.

Strongly Agree ___ Agree ___ Sometimes ___ Disagree ___ Strongly Disagree ___

Nuclear Culture

If I Were in Charge

If I were in charge of the organization, activities, and interfaces, I would apply resources to improve the organization and processes in the following areas:

I Rank the following categories in order of current needs and effectiveness – (# 1 is the least effective; has the most current needs; and is where the most resources should be applied).

- ___ Organizational Objectives and Communications
- ___ Procedure and Process Effectiveness
- ___ Individual Skills and Capabilities
- ___ Management Effectiveness, Planning, and Communications
- ___ Problem Solving Identification and Effectiveness
- ___ Program Oversight of Items and Activities

II General Areas of Needed Emphasis - Rank the following general areas: (#1 is the most important to address now):

- ___ Safety
- ___ Quality
- ___ Costs
- ___ Schedule
- ___ Excellence

III Problems/Issues – Rank the following potential problem areas as 1, 2, or 3: (#1 – One of most Important Issues; #2 – Important Issue; #3 - One of least Important Issues)

- | | |
|---|---|
| ___ Morale within the organization | ___ Lessons learned |
| ___ Interface between organizations | ___ Participatory management |
| ___ Vision, values, standards, and expectations | ___ Long-term problem solutions |
| ___ Communications | ___ Effective planning processes |
| ___ Organizational stability | ___ Processes |
| ___ Availability of resources | ___ Procedures |
| ___ Participatory management | ___ Questioning attitude |
| ___ Accountability | ___ Employee concerns |
| ___ Problem ownership | ___ Appropriate behaviors |
| ___ Willingness to live with problems | ___ Teamwork |
| ___ Effective key performance indicators | ___ Hidden cultures |
| ___ Effective oversight processes | ___ Trust, care, and concern for others |
| ___ Repetitive issues and problems | |

Nuclear Culture

IV Specific Things I would Do: List any Specific Ideas you have for improvement of the nuclear, organizational, safety, and quality cultures:

1. _____

2. _____

3. _____

4. _____

5. _____

Nuclear Culture

1. Davis-Besse incident inspires revival of regulatory philosophy

ROCKVILLE, Md. - Nuclear safety experts have no official definition of it. They don't know how to measure it. But they desperately want it at each of the nation's 103 commercial nuclear plants.

That's the odd status of an idea called "safety culture," the topic yesterday at an unusual session of the Nuclear Regulatory Commission's safety advisory board.

The NRC Advisory Committee on Reactor Safeguards summoned experts to agency headquarters to help it decide whether to recommend that the NRC bolster its regulations with new rules on safety.

It would be an upheaval in government regulatory philosophy, with the NRC moving beyond setting rules for mechanic and electrical systems and venturing into the realm of management attitudes, leadership styles, and even corporate ethics values.

"We have no insight into the safety culture of the utilities," noted Stephen Rosen, an advisory committee member.

Safety culture means the collection of characteristics and attitudes found in nuclear power plant owners and employees who put a high priority on safety.

"We need some mechanism for NRC to remove toxic leadership," suggested David Collins, an engineering analyst at the Millstone Nuclear Power Station in Connecticut, noting that overbearing executives could diminish plant safety.

Like several other speakers and committee members, Mr. Collins, expressed reservations about extensive safety culture regulations. Existing rules, they said, could get the same result, if fully enforced by the NRC.

The NRC long frowned at the idea of regulating the attitudes and ideas prevailing at nuclear power plants, and in the 1970s even forbade use of the term, Thomas Murley said. He is a former NRC regional administrator who helped pioneer the idea.

"At long last, safety culture is back from the graveyard of forbidden lexicon in this country," he noted at the workshop.

FirstEnergy Corp.'s Davis-Besse Nuclear Power Station exhumed the idea. Investigators identified a defective safety culture at the plant as a major reason for the corrosion incident that has kept Davis-Besse shut down since February, 2002.

Nuclear Culture

A leak of corrosive water, which plant managers overlooked for years while skimping on maintenance, ate a 4-inch by 5-inch hole into the Davis-Besse reactor vessel head. The vessel is a key safety system that keeps nuclear fuel and radioactive water inside the reactor.

"The principal causes of Davis-Besse were cultural," said Jack Grobe, who heads a special NRC panel overseeing improvements at Davis-Besse. "I think this area is very critical," he added, citing belief that other nuclear power plants may have similar problems.

Lew Meyers, FirstEnergy chief executive officer, told the advisory panel that safety culture improvements are among numerous changes made at the site, as it heads toward a projected restart date in August.

William Keisler, nuclear power consultant who worked at Davis-Besse in the 1980s, said that the plant's lax safety culture may be deeply ingrained, noting it has spanned three major changes in management.

The culture, he said, seems to result in serious mishaps at Davis-Besse every 8.5 years. He urged the reactor safeguards panel to recommend safety culture regulations and also demand that the nuclear industry issue a code for ethics for all its employees.

ACRS normally allots a maximum of two hours to important topics, Chairman Mario V. Bonaca said. "The decision to assign a full day to this topic gives you an indication of the importance we assign to it."

George Apostolakis, who led the ARCS safety culture subcommittee, said there is no official definition of safety culture.

"I must admit that I really don't know what a good safety culture is and what a bad one is, and I suspect many of my colleagues don't either."

The board discussed a range of possible actions, ranging from recommending that NRC regulate safety culture in cooperation with an industry group to taking no formal action and bolstering the safety environment in other ways.