# DEPARTMENT OF ENERGY QUALITY COUNCIL

# **ANNUAL REPORT**

For Calendar Year 2011



Office of Health, Safety and Security



# **Table of Contents**

EXECUTIVE SUMMARY	1
1.0 Background	3
1.1 Purpose of the Annual Report	3
1.2 Council Operations	4
2.0 2011 Council Activities	4
2.1 Council Task Team Activities in Calendar Year 2011	4
2.2 Additional Council Activities in 2011	7
2.3 Calendar Year 2012 Task Teams (Planned)	9
3.0 Council Charter and Membership	1
4.0 Path Forward	1
Appendix 1	3

# Special Memorial

During Calendar Year 2011, the Council lost two active participants with their untimely passing: Al Hawkins and Venetia Livingston. Al was an original longstanding member of the Council since its establishment in 2008 and he represented the Richland Operations Office. He was extremely active on the many endeavors and tasks accomplished by the Council. In addition to his credible QA service to DOE and the Council, Al always had a kind word for everyone. He passed away suddenly in October. Two months after losing Al, we lost Venetia Livingston to cancer. Venetia became an administrative support person to the Council in 2009 and was employed by the Project Enhancement Corporation. Her young and enthusiastic attitude was only superseded by her incredible ability to take detailed and accurate meeting minutes of all the Council's calls and meetings, as well as keep track of the teams and tasks the Council was working on. Venetia always had a cheerful and happy demeanor. Both of these accomplished people positively touched so many of our lives. We were very lucky to have known them, worked with them, and to have been their friends. Al and Venetia are, and will be, missed tremendously.

#### **EXECUTIVE SUMMARY**

Established in November 2008, the Department of Energy (DOE) Quality Council (Council) provides a forum for Federal quality assurance (QA) experts across the DOE complex, including program, field, and staff offices, to:

- Identify and recommend actions to support DOE QA policy needs;
- Strategize methods and opportunities for continuous improvement relative to the quality of DOE work and DOE QA program implementation; and
- Share lessons learned on QA best practices.

The Council's Charter has been designed to encourage a collegial approach amongst its participants, such that issues and ideas for improvement can be discussed. The Office of Health, Safety and Security (HSS) acts as an integrator and coordinator of initiatives and activities, which are developed, adopted and utilized as a result of consensus agreements within the Council.

The Council has also helped DOE QA professionals expand their networks, improve their interagency communications, and gain knowledge of QA efforts within the Department that can be applied complex-wide. As a result, several notable capabilities or best practices developed by the Council Task Teams have been made available for use across the Department. This not only provides a valuable return on investment for DOE, but also for those organizations supporting the Council membership.

The Council develops and issues an annual report to accomplish the following:

- Document initiatives and accomplishments resulting from the Council's activities from the previous calendar year (CY);
- Share the knowledge of the products/deliverables of the Council Task Teams and efforts;
- Inform the managers of the participating organizations to confirm the value of their investment of time and resources to the Council and its activities; and
- Report on upcoming Council activities and initiatives.

During CY2011, the Council accomplished the following:

- Revised the original Council-developed QA Training package for the education of HQ and Field Offices, and for potential implementation across DOE by the National Training Center;
- Provided guidance on the use of terminology within the American Society for Mechanical Engineers Nuclear Standard NQA-1, *Quality Assurance Requirements for Nuclear Facility Applications*, Part II (e.g., Nuclear Reactors) for better understanding and application by DOE, and ensured inclusion of the guidance in DOE Order (O) 414.1D, *Quality Assurance*;
- Streamlined the determination of applicability of the NQA-1 Part II requirements through the development of a white paper to aid in efficiency, consistency, and supportability when implementing NQA-1 requirements at nuclear facilities across the DOE complex;

- Assisted in implementing the Department's Directives Reform Initiative to clarify requirements and eliminate redundancy via Council member participation on either the revision teams for the QA directives and/or as peer reviewers for QA and other Directives (e.g., Integrated Safety Management);
- Strengthened the interaction between DOE and the Defense Nuclear Facilities Safety Board (DNFSB) through DNFSB staff's consistent participation and contribution of expertise, and early feedback, via the Council, on QA issues/concerns across the complex; and
- Improved DOE's ability to perform high quality, consistent management assessments of an organization's QA program per the requirements of the DOE O 414.1D via the development of management assessment tools, which are available at: http://www.hss.doe.gov/nuclearsafety/qa/assessment tools.html

# 1.0 Background

The Department of Energy (DOE) Quality Council (Council), established in November 2008, is comprised of member participants from various DOE program, field and staff offices (See the Appendix for a list of current members) and a standing number of interested party participants. The member participants are quality assurance (QA) professionals and subject matter experts, directly engaged in the management and/or execution of the Department's QA programs; and the interested party participants are comprised of both Federal and contractor employees (non-voting, active participants), who are invited by the Council Chair. Additionally, a Defense Nuclear Facilities Safety Board (DNFSB) representative is also an active interested party participant. The benefit of promoting such diversity amongst the participants becomes evident, in a broad scope, by the creation of complex-wide visibility and awareness of the Council objectives and activities, which thereby encourages interest and subsequent involvement of future member and interested party candidates.

More specifically, the framework the Council provides for DOE QA professionals to interact crossorganizationally generates a forum to discuss implementation of QA requirements, principles, and practices across the Department. By fostering this communication and interaction among QA experts in DOE Headquarters (HQ) program offices, HQ staff offices, and field offices through their respective participation in the bimonthly teleconferences, Face-to-Face meetings, and in Council initiatives, a greater awareness of QA requirements, best practices, lessons learned, and current and emerging issues continues to be achieved.

# 1.1 Purpose of the Annual Report

The purpose of this report, which is required by the Council Charter, is to document Council activities during the calendar year (CY). By doing so, the Council takes the opportunity to inform the DOE QA community as to what key QA topics the Council considered timely and in need of attention, as well as what activities are planned for the next year. This in turn, provides:

- a means to showcase the value of the Council activities to the DOE community, thereby promoting QA continuous improvement initiatives across the complex;
- a communication pathway for the DOE community to identify, for the Council's consideration, potential issues and/or topics that may warrant attention and have not yet been addressed by the Council;
- an opportunity to share success stories and lessons learned experiences directly with the Council, and through the Council, with the rest of the DOE community in an effective manner;
- a mechanism for feedback from the DOE community on the activities and results of the Council; and
- information on how to access the Council's current work products as well as a listing of impending work products.

# 1.2 Council Operations

The Council meets via bimonthly teleconferences, and an annual face-to-face meeting typically held in the fall/winter. During the bimonthly meetings, cross-cutting and topic quality-related issues are brought forth for consideration; topics are discussed as action items are developed; status and progress of ongoing tasks are discussed; and action plans are developed for paths forward. The face-to-face annual meeting held in Germantown, MD, is instrumental in synthesizing the initiatives of the prior year and in planning for activities in the upcoming year. At this meeting, new and existing Council members participate in the sharing of information regarding QA activities within DOE, and discuss the status of current Council initiatives. Results and deliverables from the Council's efforts are shared with the DOE QA community via the Council's web page, located at: (http://www.hss.doe.gov/nuclearsafety/qa/council/index.html) or by other means as delineated in this report.

#### 2.0 2011 Council Activities

The Council activities include both major Task Team activities that are controlled via Task Planning Documents (TPDs), and other QA activities which are not controlled via TPDs. This section of the report provides details describing these activities.

#### 2.1 Council Task Team Activities in CY 2011

The Task Team activities, performed in 2011, were as follows:

#### **DOE QA Order Training**

The development of DOE HQ QA Order training was identified as a priority at the first meeting of the Council in late CY 2008. The Council decided that QA training was necessary to educate DOE staff on the importance of quality as well as the DOE expectations contained in DOE O 414.1C, *Quality Assurance*. As a result, a Task Team was formed in 2009 to develop training that would provide a general explanation of this Order. The first pilot training was conducted in late 2010 in Germantown, MD, and had 14 participants from the Office of the Chief Information Officer (IM), HSS, and the Office of Science (SC), as well as a DNFSB technical staff member. Based on the comments and feedback received from the pilot participants, the training materials were revised by the Task Team to include a general explanation of QA definitions, principles, and DOE requirements from DOE O 414.1D. The revised pilot training was delivered at the 2011 Council Annual Face-to-Face Meeting held in December 2011. Comments received at the 2011 Face-to-Face Meeting are being incorporated, and the revised training is expected to be available in late 2012 for use by HQ and field personnel. Prior to finalization in 2012, the training package will be reviewed by the National Training Center for recommendations on presentation options (e.g., online, in-classroom, etc.) and other aspects of the training.

Task Team members for this task includes Council members and other representatives from HSS [Lead], Office of Energy Efficiency and Renewable Energy (EE), and National Nuclear Security Administration (NNSA).

## **Application of NQA-1 Part II**

A Task Team was formed to (1) clarify the interpretation by DOE personnel (including contractors) of the terminology used in American Society for Mechanical Engineers (ASME) Nuclear Standard NQA-1, *Quality Assurance Requirements for Nuclear Facility Applications*, Part II, and (2) provide a white paper on the application of the requirements in this part of NQA-1.

The team provided language to clarify the use of the terms "Nuclear Reactor" and "Nuclear Facility" in NQA-1 Part II, for application at DOE nuclear facilities, which was incorporated into DOE O 414.1D.

The white paper discusses a methodology that DOE programs can use to determine the applicability of requirements in NQA-1 Part II in a more efficient, supportable and uniform approach for the DOE complex. The white paper was developed with input from the Energy Facility Contractors Group (EFCOG) QA Subgroup and can be found at: http://www.hss.doe.gov/nuclearsafety/qa/docs/NQA Part II Applicability Final.pdf.

Task Team members for this task included Council members, other representatives from Idaho Operations Office (ID) [Lead], NNSA and Los Alamos Site Office (LASO).

## Quality Assurance Program (QAP) Incorporated with Integrated Safety Management (ISM)

This Task Team developed a non-mandatory template to aid users in documenting implementation of DOE requirements for ISM and QA into a single program description document.

This activity was initiated because many sites expressed difficulties regarding an effective process to integrate QA program requirements and the ISM System (ISMS) requirements. The final product was approved by the Council and is available on the Council web page for use by DOE programs as a suggested method to integrate required ISM and QA program documentation in a single document. The template can be found at:

http://www.hss.doe.gov/nuclearsafety/qa/docs/ISM QA Integration Template Final 8-23-11.pdf.

Task Team members for this TPD included Council members and other representatives from ID [Co-Lead], Office of Fossil Energy (FE) [Co-Lead], HSS, and Richland Operations Office (RL).

#### Performance Metrics for QA Program Effectiveness

The development of performance metrics is widely accepted as a necessary component for evaluating work efficiency and the promotion of continuous improvement (a major element of effective and track-able QA programs). The Council formed a Task Team in CY 2010 to develop guidelines, processes, and/or methodologies for selecting performance metrics to measure the effectiveness of Federal QA programs. Examples of QA program effectiveness performance metrics, and the processes by which they were developed, were collected from DOE HQ Program and Staff Offices, Operations Offices, and contractors, as well as from government agencies

external to DOE. In developing the deliverable for this TPD, it was discovered that there were nuances that needed to be addressed when attempting to develop performance metrics for an organization that produces intangible products (i.e., does not develop "widgets") such as policies or interpretation of such. These types of metrics are considered "soft metrics" and, with this realization, the Task Team took a different approach to its TPD instructions. In mid-2011, the team re-focused its efforts to instead develop a thought-process on the development of soft performance metrics for consideration by what the Council termed "policy promulgating organizations." The deliverable was developed and finalized in October 2011. It is available for review or use by request. Several Council member organizations will attempt to implement the concepts in the deliverable, and results of these pilots are expected to be shared at a future date.

Task Team members for this TPD included Council members and other representatives from HSS [Lead], ID, EE, SC-Chicago (CH), NNSA, Brookhaven Site Office (BHSO), Office of the Chief Human Capital Officer (HC), IM, SC, Office of Legacy Management (LM), and Savannah River Operations Office (SROO).

#### **Quality Surveys and Management Assessment Tools**

In 2011, the Council identified an opportunity to reduce requirements and eliminate duplicative efforts across all DOE Elements related to management assessments and the Survey on Quality Assurance Implementation (the Survey). The Survey asked questions on the status of QA throughout DOE and required the responses to be reported to HSS and rolled up in a report to the Deputy Secretary. However, the Survey resulted in duplicative efforts for those DOE Elements who had separate management assessment reporting requirements. In April 2011, DOE O 414.1C was revised and reissued as DOE O 414.1D, which no longer requires DOE Elements to report the results of those assessments to the Deputy Secretary through the Survey. This change eliminated a significant "data call" across the DOE complex. On August 5, 2011, the Council issued a memorandum through HSS to DOE senior management to close out the efforts on the 2009 Survey on QA Implementation and to inform DOE Elements that DOE would no longer be requesting DOE Elements to complete the Survey.

However, DOE O 414.1D continues to require DOE Elements to perform management assessments in accordance with Criterion 9 and the Council recognized that some DOE Elements had been using the Survey as a tool to perform their management assessments. Consequently, in order to replace that function of the Survey, the Council took on the task of preparing optional replacement tools.

There are distinct differences between DOE program and field Offices, and DOE staff offices. Therefore, the Council formed two separate Task Teams to identify the unique needs of these respective sets of customers. Each team was formed with representatives of the intended customers, and each team developed an appropriate management assessment tool, tailored to the needs of the intended users. Each final tool is posted on the Quality Assurance Library/Training web page and can be found at: <a href="http://www.hss.doe.gov/nuclearsafety/qa/doc library.html">http://www.hss.doe.gov/nuclearsafety/qa/doc library.html</a>.

Task Team members for the program and field offices' TPD included Council members and other representatives from HSS [Lead], ID, SC, NNSA, RL, BHSO, and Office of River Protection (ORP).

Task Team members for the staff offices' TPD included Council members and other representatives from HSS [Lead], Office of Management (MA), HC, Office of Congressional and Intergovernmental Affairs (Cl), FE, Office of Economic Impact and Diversity (ED), Office of the Inspector General (IG) and IM.

#### 2.2 Additional Council Activities in 2011

In addition to the Task Team activities discussed above, the Council had other initiatives it participated in that were not part of the TPD process. These included:

#### **Revision to DOE Safety Directives**

The Council members and its interested parties participated in the efforts to revise DOE O 414.1C (now DOE O 414.1D), and DOE Guide (G) 414.1-2A, Quality Assurance Management System Guide for Use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance (now DOE G 414.1-2B, Quality Assurance Program Guide), which were issued on April 25, 2011, and August 16, 2011, respectively. Council members were active participants on each of the revision teams and provided internal reviews of several drafts of each directive.

#### **DNFSB Interaction**

The Council continued to interact closely with DNFSB Staff on Council activities. Since the Council's inception, and especially during CY 2010 and CY 2011, one DNFSB Staff representative has been engaged in work conducted by the Council. His participation has provided value added in many areas including software quality assurance and the issuance of DOE O 414.1D. Additionally, the representative attended and presented at the 2011 Face-to-Face Meeting; participated regularly in the Council bimonthly conference calls; and participated in several Council initiatives.

#### **EFCOG**

The Council continued to interact closely with the EFCOG QA Subgroup through participation of Council members in EFCOG meetings and other EFCOG Subgroup activities. The general EFCOG approach is to form a working group and develop lessons learned or guidance documents in specific areas of interest. These documents are then made available on the EFCOG web page for general use (see: <a href="http://www.efcog.org/wg/ism/index.htm">http://www.efcog.org/wg/ism/index.htm</a>). The EFCOG Subgroups also facilitate personnel exchanges among members for purposes such as third-party reviews and joint supplier audits. In the QA improvement area, the EFCOG QA Subgroup has working groups addressing QA policy implementation, quality control benchmarking, supplier chain development, and feedback & improvement. These activities link directly to the Council activities including the QA Order revision, QA training, commercial grade dedication (CGD), performance metrics for effective QA programs, and lessons learned. Several Council members attended the EFCOG QA meetings held in CY 2011. The Chair of the EFCOG QA Subgroup attended and presented at the December 2011 Quality Council Annual Face-to-Face Meeting.

#### Semi-annual Quality Assurance Exchange Newsletter

Council members provided noteworthy articles for publication in the HSS Office of Quality Assurance semi-annual *Quality Assurance Exchange* (QAE) newsletter. In CY 2011, the QAE newsletter featured articles on safety software quality assurance, CGD, suspect/counterfeit items (S/CI) initiatives across the DOE complex, the activities of the EFCOG Subgroups, and the actions of the joint Office of Environmental Management (EM)-EFCOG QA summit. For information regarding any of these topics, see the 2011 newsletters posted on the Office of Quality Assurance web page at: http://www.hss.doe.gov/nuclearsafety/qa/newsletters/.

## QA Track at the 2011 ISM Conference

As in previous years, the Council organized a QA Track for the Annual DOE ISM Conference in Kennewick, WA, on September 14, 2011. Papers presented focused on two areas: (1) supply chain management (including CGD, use of small businesses in an NQA-1 environment, and suspect counterfeit electronics) and (2) quality system improvements (including software quality, and paperless nonconformance reporting). The themes emerging from the presentations (i.e., teamwork, focus on people, communication, and continuous improvement) were in concert with the overall conference theme, "360° Safety – Enhancing Worker Situational Awareness." The QA Track was well attended, with about 45 people at each presentation – standing room only for the space allocated. For more information on the 2011 Annual ISM Conference or to obtain copies of any of the presentations listed above, see: <a href="http://www.ism2011.com/">http://www.ism2011.com/</a>.

# 2011 Face-to-Face Meeting Trainings and Presentations

This year's Annual Face-to-Face Meeting was again well attended with over 80 percent of the Council members represented. Limited travel funds forced a few members to participate in selective agenda sessions via a WebEx connection. The following DOE offices were represented either in person or via the WebEx: HSS, Office of Environmental Management (EM), SC, Office of Nuclear Energy (NE), IM, NNSA, MA, CH, SROO, ID, ORP, and RL. A non-Council-member representative from EM was in attendance, and he provided White Belt Lean Six Sigma (LSS) training to all who attended the Face-to-Face Meeting.

Council business during the meeting included the election of a new co-chair. Mr. Bob Blyth, Idaho Operations Office, stepped down as the Council Co-Chair and Mr. Nate Morley, NNSA, was elected for the two-year appointment. Mr. Morley brings to this position 20 years of QA experience. In addition, other business conducted included voting on six new TPD topics, which are as follows: developing a CGD summary of good practices; developing a crosswalk of DOE O 414.1D to ISO 9000:2008, and to NQA-1-2008; identifying QA functions and staffing; updating the QA Criteria Review and Approach Document (CRAD); consolidating best practices/lessons learned for S/CI; and the formation of an S/CI working group. Each of these proposed TPD topics is briefly discussed in Section 2.3 of this report.

Finally, in addition to two training sessions that were held during the meeting (i.e., White Belt LSS, and the Council-developed QA training), topics presented and discussed at the meeting were: S/CI Program lessons learned; High Efficiency Particulate Air (HEPA) Filter inspection lessons learned;

EM lessons learned from their assessments in 2011; DNFSB staff perspectives; Software Validation modeling; and revision to both DOE G 414.1-1B, Management and Independent Assessments Guide for Use with 10 CFR Part 830, Subpart A, and DOE O 414.1C, Quality Assurance; DOE M 450.4-1, Integrated Safety Management System Manual; and DOE O 226.1A, Implementation of DOE Oversight Policy, and DOE Standard 1150, Quality Assurance Technical Qualification Program.

# 2.3 Calendar Year 2012 Task Teams (Planned)

During 2012, the Council plans to increase the coordination with EFCOG and its initiatives to develop additional tasks to address issues that can be collaborated on. In particular, the Council will develop new Task Teams for the following areas:

#### **Upgraded CGD Implementation**

EM identified issues with the understanding and implementation of CGD at their sites. Based on this, EM developed an EM-focused CGD Training module and CGD Guide, both of which address the dedication of software to accommodate the new requirements contained in ASME-NQA-1a-2009.

To further enhance the understanding and application of CGD throughout DOE, this Task Team will (1) summarize the salient points of the EM-developed CGD Guide and (2) evaluate the benefit of converting this Guide into a DOE technical standard.

Team members include Council members and other representatives from ORP [Lead], ID, NNSA, EM, HSS, and the Office of the Chief of Nuclear Safety (CNS).

#### Crosswalk of Requirements in DOE O 414.1D, NQA-1-2008, and ISO 9001:2008

A Task Team will be formed to develop a crosswalk between requirements in DOE O 414.1D, ISO-9001-2008 and NQA-1-2008 and its 2009, 2011 Addenda to assist sites with adoption and implementation of an appropriate consensus standard for use with DOE O 414.1D. This crosswalk will be made available for use by all DOE programs.

Team members include Council members and other representatives from NNSA [Lead], NE, HSS, and RL.

## **QA Functions and Staffing**

Definition of the functions, roles and responsibilities of QA professionals within DOE has been identified as area for improvement. This Task Team's goals are to (1) develop guidance which could be used to assist DOE managers in understanding the functions, roles, and responsibilities that QA professionals are capable of fulfilling for their organizations; (2) to gather benchmark data regarding QA staffing levels for various types of facilities and organizations (e.g., nuclear facility operations, new nuclear facility construction, complex non-nuclear facility operations, etc.); and (3) recommend minimum staffing levels to fulfill these functions. The deliverable for this Task Team will be a technical paper, which will address the Federal positions of QA Engineers, QA

Specialists, and QA points-of-contact, as well as present the benchmark information regarding QA staffing levels for the various types of facilities and recommend a minimum staffing levels model that could apply to the site/organization based on industry/government best practices. It is hoped that the understanding of the roles and functions of QA professionals, and benchmark information on QA staffing levels, will aid Federal managers in their decisions regarding the QA staffing levels that are appropriate for the work for which they are responsible.

Task Team members include Council members and other representatives from CH [Lead], HSS, FE, MA, IM, LM, and EM.

#### Updating the QA Criteria Review and Approach Document (CRAD)

A Task Team will be formed to review and revise the existing QA CRAD to capture changes as a result of the issuance of DOE O 414.1D, and will develop additional CRAD content to be added to address NQA-1 requirements.

Task Team members include Council members and other representatives from HSS [Lead], SC, and NNSA.

#### Best Practices/Lessons Learned for S/CI

The growth of foreign manufacturing and the decline in the U.S. manufacturing sector have made it necessary for the U.S. Government and industry to take increased preventive measures to address the growing presence of S/CI. It is now well known that S/CI has made its way into the U.S. market supply chain. S/CI can significantly impact the safety and security of systems and components used by the Department of Defense, NNSA, National Aeronautics and Space Administration, Federal Aviation Administration, DOE, and general industry. This Task Team will focus on capturing best practices, lessons learned, and supportive information concerning S/CI for DOE, especially in field applications. The team will take the information that is already available and compile it into one location for people to reference.

Task Team members include Council members and other representatives from LASO [Co-Lead], RL [Co-Lead], HSS, EM, and SROO.

#### S/CI Working Group

The purpose of the S/CI Working Group is to ensure that the requirements described in Attachment 3, *Suspect/Counterfeit Items Prevention*, of DOE Order 414.1D, are able to be implemented effectively. In addition, the group will evaluate other actions that may be appropriate for the Department to consider. The Working Group will provide a forum to recommend resolutions as well as to identify and recommend actions for continuous improvement in the area of S/CI.

Working Group members include Council members and other representatives from HSS [Lead], LASO, RL, EM, NNSA, and SROO.

# 3.0 Council Charter and Membership

The original Council Charter was signed and issued in November 2008 and revised in 2010 based on lessons learned. Additional changes to the Charter were discussed during the 2010 Annual Faceto-Face Meeting, and the Charter was again revised and re-issued in June 2011. The significant change included moving from monthly to bimonthly conference calls with the time slot in the opposing months to be used for Task Team meetings and activities.

Potential revisions to the Charter continue to be discussed during the Council's bimonthly conference calls, and changes made as appropriate. An updated Charter will be submitted to the Chief Health, Safety and Security Officer for approval and signature in 2012, if needed.

During CY 2011, the Council had several changes in membership. New members from the Office of Quality Assurance (HS-33) and NNSA were nominated and appointed, but the nominations from the Strategic Petroleum Reserve Project Management Office and HC remained pending. The representatives from LM, RL, and Carlsbad Field Office (CBFO) have been replaced by new members assigned by each of these organizations.

#### 4.0 Path Forward

In addition to the Task Teams planned for 2012 (see Section 2.3), the Council will be participating in various other initiatives, including:

- Revision to DOE Guide (G) 414.1-1B, Management and Independent Assessments Guide for Use with 10 CFR Part 830, Subpart A, and DOE O 414.1C, Quality Assurance; DOE M 450.4-1, Integrated Safety Management System Manual; and DOE O 226.1A, Implementation of DOE Oversight Policy
   The Council members will form the integrated team to develop the update to the Guide during CY 2012. Changes will ensure alignment with DOE O 414.1D requirements as well as remove unnecessary overlap with the draft DOE G 226.1-2, Federal Line Management Oversight of Department of Energy Nuclear Facilities, (draft Oversight Guide) currently being developed.
- Revision to DOE G 414.1-4, Safety Software Guide for Use with 10 CFR 830, Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance

  The Council members will provide peer review and comment on the revision to the Safety Software Guide. Changes to this Guide will ensure alignment with DOE O 414.1D and the corresponding NQA-1 requirements.
- Revision to DOE-STD-1150, Quality Assurance Functional Area Qualification Standard During the latter part of CY 2011, HSS, with the assistance from Council members, initiated the revision to DOE-STD-1150 by completing the Job Task Analysis (JTA) for this qualification standard. During the annual Face-to-Face Meeting in December 2011, the team was expanded to include a vast representation from the various offices participating in the annual meeting and began the process to revise the standard based on the JTA and on the

recently revised DOE O 414.1D. The entire Council will be participating in this endeavor in CY 2012 as peer reviewers prior to the standard entering the RevCom process.

## • Development of Lean Six Sigma (LSS) Training

Lean Six Sigma is a relatively new quality improvement methodology resulting from the combination of the individual Lean and Six Sigma methodologies, which are described as follows:

- Lean focuses on eliminating waste from processes and increasing process speed by focusing on what customers actually consider quality, and working back from that.
- **Six Sigma** aims to eliminate process variation and make process improvements based on the customer definition of quality, and by measuring process performance and process change effects using statistical methodology.

The Council will be a part of efforts to develop LSS training to be available for DOE and DOE contractors in the Washington, DC area. The Council will work with EM to develop DOE White Belt training based on training given by the General Services Administration to DOE participants in 2011.

#### • Enhanced EFCOG Interface

During CY 2012, Council members will increase coordination with EFCOG and its initiatives. The Council will work with EFCOG and plans to develop a protocol where Council TPD teams and EFCOG Subgroups merge efforts on similar topics to jointly develop deliverables and products that will provide guidance and education for consistent and proper implementation of QA across the DOE. In addition, Council members will continue to participate in semi-annual meetings with EFCOG to maximize skills usage and coordination for the betterment of the Department's implementation of QA.

**Appendix**CY 2011 DOE Quality Council Members

#	Name	Organization	Location
1	Colette Broussard*	Office of Health, Safety and Security (HSS)	Germantown (GTN)
2	Gary Staffo	Office of Energy Efficiency & Renewable Energy (EE)	Forrestal (FORS)
3	Rick DuBose	Office of Fossil Energy (FE)	FORS
4	Duli Agarwal	HSS	GTN
5	Joe Desormeau	Office of Legacy Management (LM)	Grand Junction
6	Sam Johnson	National Nuclear Security Administration (NNSA)	GTN
7	Tom Williams	NNSA	Lawrence Livermore Site Office
8	Nate Morley**	NNSA	Albuquerque
9	Thanhtan Van Ober	NNSA	FORS
10	Matt Cole	Office of Science (SC)	GTN
11	Caroline Polanish	Brookhaven Site Office (BHSO)	Brookhaven
12	Bob Blyth	Idaho Operations Office (ID)	Idaho
13	Anita Leivo	Los Alamos Site Office (LASO)	Los Alamos
14	Sam Vega	Office of River Protection (ORP)	Richland
15	Steve Chalk	Richland Site Office (RL)	Richland
16	Bill Rowland	Savannah River Operations Office (SROO)	Savannah River
17	John Adachi	SC-Chicago (CH)	Argonne
18	Mary Haughey	HSS	GTN
19	Subir Sen	HSS	GTN
20	Randy Unger	Carlsbad Field Office (CBFO)	Waste Isolation Pilot Project (WIPP)/Carlsbad
21	Bob Murray	Office of Environmental Management (EM)	FORS
22	Bruce White	Office of the Chief Information Officer (IM)	GTN
23	Darrell Huff	Office of Nuclear Energy (NE)	GTN
24	Ruben Sanchez	Office of Management (MA)	FORS
25	Rick Shutt ***	Strategic Petroleum Reserve Project Management Office (SPRPMO)	New Orleans
26	Tony Nguyen ***	Office of the Chief Human Capital Officer (HC)	FORS

<sup>\*</sup>Chair

<sup>\*\*</sup>Vice Chair

<sup>\*\*\*</sup>Pending Nomination Request for Membership