



2008

Annual Report



Energy Facility Contractors Group
Excellence Through Cooperation

ANNUAL REPORT TO THE MEMBERS FY2008

EFCOG'S MISSION

Promote excellence in all aspects of the operation, management, and integration of DOE facilities in a safe, environmentally sound, efficient and cost-effective manner.

VALUE PROPOSITION FOR EFCOG

CUSTOMERS

EFCOG is committed to the achievement of DOE's goals through performance excellence by partnering with DOE and its stakeholders in a collaborative and trusting environment. We provide an integrated, forward-looking contractor view on topics of common interest. We facilitate multiple forums for open communication, provide constructive feedback, and propose solutions that result in continuous improvement.

VALUE PROPOSITION FOR EFCOG

MEMBERS

EFCOG offers members a leveraged opportunity for involvement with DOE leadership through a relationship of mutual trust. We provide a forum for sharing lessons learned, solving cross-cutting problems, and creating best practices. Our goal is to enhance mission accomplishment through continuous improvement of performance and productivity.

Cover photo: NNSA's Highly-Enriched Uranium Materials Facility at the Oak Ridge Reservation's Y-12 complex

Copies of this annual report will be posted on the EFCOG website. For additional hard copies of the report, please contact the EFCOG website administrator at 760-745-1733.

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NOTE FROM THE CHAIR



The year ending September 2008 was one of outstanding accomplishment for the Energy Facility Contractors Group (EFCOG), thanks to strong support from the Department of Energy (DOE) and our member companies. EFCOG continued to focus on both broad-based support to key DOE policy initiatives and on providing support to individual programs in key areas.

In 2008, EFCOG addressed mission critical issues in the DOE complex in areas related to safety, security, project management, infrastructure management, contractor performance assurance, energy usage, quality assurance, engineering, and human capital. Our membership increased from 63 active companies during FY 2008 to 67 companies by early FY 2009, providing an extensive resource base to address issues and share lessons learned across the DOE complex. We welcome the four new member companies to EFCOG – Advanced Technologies and Laboratories, EnergX LLC, Navarro Research and Engineering Inc., and Savannah River Nuclear Solutions – and look forward to those new member companies’ contributions and participation in the years ahead.

As clearly stated in its charter, EFCOG’s objectives are to promote, coordinate, and facilitate the active exchange of successful programs, practices, procedures, lessons learned, and other pertinent information of common interest which have been effectively utilized by DOE contractors; the objective is to enhance operational excellence and cost effectiveness for continual performance improvement by other contractors. EFCOG’s primary goal continues to be to work safely and cost effectively throughout the DOE complex, sharing best practices and lessons learned. EFCOG continually benchmarks operating performance in related industries (e.g., the commercial nuclear and chemical industries), and maintains a close working relationship with other groups such as the Institute of Nuclear Power Operations and the Nuclear Energy Institute. The positive impact of EFCOG contributions can be magnified by sharing experiences and information through a broad membership of DOE contractors.

2008 ACCOMPLISHMENTS

The majority of EFCOG’s activity is conducted by its Working Groups. The 14 Working Groups chartered during calendar year 2008 have representatives from EFCOG member companies, working in cooperation with DOE counterparts, to address critical issues throughout the complex. Background information, activities, accomplishments, and plans for 13 of these Working Groups are described in this report. The 14th Working Group –Waste Management – was established at the end of calendar year 2008, and is not described in this report. All 14 current Working Groups are shown in Table 1.

Demonstrating the level of EFCOG activity, more than 1,200 subject matter experts participated in a range of activities (i.e., Working Groups, Subgroups, Task Teams, Steering Committees, Board of Directors, etc.) throughout 2008.

TABLE 1. 2009 CURRENT WORKING GROUPS

Acquisition Management	Contractor Assurance	D&D and Facility Engineering	Energy Efficiency
Engineering Practices	Environmental Safety & Health	Human Capital	Infrastructure Management
Integrated Safety Management and Quality Assurance	Project Management	Safety Analysis	Safety and Security Regulatory
	Safeguards and Security	Waste Management	

During 2008, EFCOG held more than 60 Working Group meetings, major teleconferences, and other activities focused on the above areas. A comprehensive listing of activities and accomplishments for each Working Group is contained in the “Working Group Reports” section of this report. Some of the major accomplishments of the Working Groups included:

- augmenting the EFCOG "Best Practices" website – which provides a single reference point for all contractors and the DOE – with several new best practices, such as in the area of decontamination and decommissioning (D&D) of excess facilities
- providing feedback to DOE on its Corrective Action Plan to address the findings of the April 2008 Root Cause Analysis Report on Contract and Project Management issues – a critical effort to have DOE removed from the General Accounting Office “high risk” list
- using the newly formed Cost Estimating Subgroup in the Project Management Working Group, supported DOE in the development of new Orders on cost estimating and analyses, and conducted the 2nd annual cost estimating workshop
- supporting DOE’s initiative to implement the new DOE Standard 1189, “Integration of Safety into the Design Process”, and developing several Implementation Guides for Manual 413.3, “Program and Project Management for the Acquisition of Capital Assets”
- maintaining a Center of Excellence for electrical safety and developing tools that will assist in electrical safety performance tracking and hazard analysis; initiated revision of the electrical safety handbook for use across the complex
- establishing a fully-functional D&D Knowledge Resource Center as a front-line effort to disseminate best practices; the Center includes a D&D hotline and an associated website
- continuing to provide strong focus on meeting the DOE safeguards and security management challenges by enhancing the protection of special nuclear material, classified matter, property, and cyber systems – through efforts such as completing a security metrics study to

- identify a methodology to aid in the overall assessment of the security performance of the DOE complex, and initiated work with the U.S. Nuclear Regulatory Commission (NRC) on the joint Nuclear Materials Management and Safeguards System process
- placing a strong focus on addressing key infrastructure issues including improved asset utilization, deferred maintenance, alternate financing, effective performance metrics, and work management
 - continuing efforts to improve assessment programs focused on moving from an “event driven” to an “assessment discovered” approach throughout the DOE complex – such as the preliminary development of leading indicators for contractor performance, and conduct of multiple integrated program/peer reviews
 - providing safety education and training through vehicles such as the 18th annual safety analysis workshop, the safety basis workshop, and the 19th annual chemical management workshop
 - holding multiple management forums with DOE’s Office of Environmental Management to address operational issues during site cleanup
 - continuing efforts to support DOE in addressing 10CFR851, “Worker Safety and Health Program” implementation issues
 - initiating several significant efforts to address current and future contractor human capital issues, such as baselining the health and productivity of the current workforce, and identifying management and operating contractor policy issues
 - supporting DOE’s Federal Management Program through efforts such as providing feedback on the revised Order 430.2B, “Departmental Energy, Renewable Energy, and Transportation”, and sharing lessons learned on energy saving performance contracts and water usage guidance
 - holding management forums and workshops with DOE to discuss how to improve construction project management and performance
 - conducting a survey of DOE contractors concerning the cost of responding to solicitations, and providing preliminary feedback to DOE
 - supporting DOE’s Office of Health, Safety, and Security (HSS) in efforts to improve the existing set of safety directives
 - continuing to provide input on radiological protection, such as a new initiative focused on a more standardized approach to approving authorized limits related to environmental cleanup of contaminated DOE sites
 - initiating the Occurrence Reporting and Processing System Task Group, who developed a generic training module, and conducted training sessions
 - supporting a rewrite of the quality assurance guidance document for more effective project execution
 - conducting peer reviews of Price-Anderson and worker safety and health programs at numerous sites
 - establishing a Safety Culture Task Team to evaluate integrated safety management coverage of safety culture criteria, with a clear focus to take Integrated Safety Management to the next level of performance
 - and, initiating an effort with the Project Management Institute to understand the value of project management in research and development programs

FUTURE VISION

In 2009, EFCOG will continue to work in partnership with DOE focusing on mission critical items in all program areas and attempting to improve our performance in the areas of safety, project management, security, engineering, human capital, performance assurance and infrastructure management. EFCOG's partnership with DOE helps to assure that issues are identified and prioritized for action. EFCOG encourages recommendations from DOE, and our members, on areas where EFCOG might add value. EFCOG also envisions a close collaboration with DOE's Office of Engineering and Construction Management in the coming year as that office continues to take the lead in addressing DOE-wide contract and project management weaknesses, and upgrading its program assessment and reporting system.

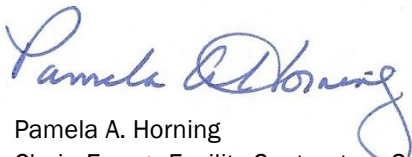
Close dialogue with oversight/regulatory organizations, including the Defense Nuclear Facilities Safety Board, DOE's HSS, and the NRC, will be maintained to assure that our members are aware of emerging safety and regulatory issues. In addition, EFCOG will continue to expand our cooperation with other industry groups, such as with the Project Management Institute and the Association for Advancement of Cost Engineering, for additional opportunities for information exchange, lessons learned, and training. Finally, we will also continue to focus on how EFCOG might be made more valuable to DOE and our member companies.

CONCLUDING REMARKS

As we have already witnessed in 2009, the year ahead is certain to bring changes and new challenges throughout the new Administration, Congress, and the DOE complex. EFCOG remains strongly committed to working with DOE to meet these new challenges, as well as working safely and efficiently, and continuously improving performance.

I encourage all EFCOG members and DOE counterparts to actively participate in EFCOG initiatives. EFCOG's ability to improve performance within the DOE complex is directly related to the active and positive participation of our members and DOE counterparts.

EFCOG's Board of Directors and membership look forward to working with you throughout the coming year.



Pamela A. Horning
Chair, Energy Facility Contractors Group

INTRODUCTION AND OPERATIONS

Over the past 18 years, DOE contractors have worked together through EFCOG to disseminate common solutions to problems (along with lessons learned and best practices), improving operations throughout the Department of Energy (DOE) complex. The benefits derived from this approach include improvements in safety and security; lower costs by sharing data and other resources; direct cost savings, or cost avoidance, by sharing successful processes, procedures and technical information; and effective execution of programs and projects results when common problems are addressed jointly. As its operations have matured, EFCOG continued to seek opportunities to work with DOE to address critical issues as they evolve.

Executive direction for EFCOG comes from a 15 person Board of Directors elected from the Executive Council. The Executive Council is comprised of an appointed representative from each of the member companies. The work of EFCOG is most frequently carried out by subject matter experts in Working Groups formed and chartered by the Board with specific objectives and deliverables. Each Working Group has an EFCOG Board Sponsoring Director, as well as one or more DOE (including the National Nuclear Security Administration, or NNSA) counterpart Sponsors.

Working Groups may create Subgroups or Task Groups to concentrate on a specific aspect of the Working Group's overall purpose. Subgroups have a charter and operate for an indefinite period of time to cover a major subject area within the purview of the sponsoring Working Group. Task Teams are usually formed within a Working Group to address a single issue in a defined timeframe with clearly prescribed deliverables. Working Groups provide an annual report to the Board of Directors. These are incorporated as part of this report. Working Groups will not engage in lobbying, or take public positions opposing DOE on issues, regulations, DOE Orders, etc..

In 2008, EFCOG achieved tangible results in the areas of acquisition management, contractor assurance, decontamination and decommissioning (D&D)/facility engineering, energy efficiency, engineering practices, environment/safety/health, human capital, infrastructure management, integrated safety management/quality assurance, project management, safety analysis, security, and safety/security regulatory. EFCOG key activities, or work products, and achievements for 2008 included, by Working Group, the following:

ACQUISITION MANAGEMENT

- Benchmarked prime contract revision processes and practices, and work-for-others subcontract processes and practices, and identified possible streamlining to DOE
- Conducted a survey of DOE prime contractors concerning the cost of responding to solicitations, and provided preliminary results to DOE
- Reviewed implementation of small business procurement rules for possible improvements

CONTRACTOR ASSURANCE

- Initiated development of an approach to formulate leading indicators in contractor performance, and shared insights with the Defense Nuclear Facilities Safety Board (DNFSB)
- Shared information on correction action effectiveness, contract requirements flowdown, and effective use of lessons learned and operating experience programs
- Studied the use of industry standards in lieu of DOE directives, and supported the DOE Office of Health, Safety and Security (HSS) to improve the existing safety directives

D&D AND FACILITY ENGINEERING

- Issued and posted seven new D&D best practices and published on the EFCOG Best Practices website
- Provided review and input to DOE in its development of implementation guides for DOE Order 413.3, “Program and Project Management for the Acquisition of Capital Assets”, with special focus on the guide for the Office of Environmental Management’s cleanup projects (DOE G 413.3-8)
- Continued to provide review and input to DOE on a radiological protection initiative focused on a more standardized approach to approving authorized limits and the associated plan for conducting independent verification of cleanup sites; performed independent verification of one DOE cleanup site (Oak Ridge Reservation, Tennessee)
- Established a fully-functional D&D Knowledge Resource Center as a front-line effort to disseminate best practices; the Center includes a D&D hotline and an associated website – an extension of the existing successful as low as reasonably achievable (ALARA) hotline set up and maintained by the ALARA Center at the Hanford Site, Washington

ENERGY EFFICIENCY

- Facilitated significant information exchange with DOE’s Federal Energy Management Program through a joint GovEnergy Conference
- Coordinated responses to DOE regarding revised Order 430.2B, “Departmental Energy, Renewable Energy, and Transportation Management”
- Shared lessons learned and provided feedback to DOE on Energy Saving Performance Contracts, water guidance, and renewable energy projects

ENGINEERING PRACTICES

- Supported DOE in the issuance and implementation of DOE Standard 1189, “Integration of Safety into the Design Process”, including conduct of an implementation workshop (a joint effort with the Safety Analysis Working Group)
- Helped DOE’s HSS in the development of a new standard to provide guidance on design of safety instrumented systems
- Supported DOE in its response to the DNFSB Recommendation 2008-1 on fire protection systems

ENVIRONMENTAL SAFETY AND HEALTH

- Initiated revision of the Electrical Safety Handbook, through the newly established Electrical Safety Subgroup, and maintained the associated Electrical Safety Center of Excellence
- Co-sponsored the Tenth Annual Joint EFCOG/DOE Chemical Management Workshop, focused on chemical management at DOE sites, 10 CFR 851, “Worker Safety and Health Program,” chemical emergency response, nanotechnology, and beryllium safety
- Supported DOE in its establishment of a Chief Medical Officer function and established a medical peer review process
- Completed the chemical inventory management benchmarking survey of 12 facilities/sites and disseminated the results
- Collected and shared lessons learned in the implementation of the recently revised 10CFR835, “Occupational Radiation Protection”
- Established a new subgroup focused on testing and commissioning

HUMAN CAPITAL

- Successfully transitioned from a task group to a full Working Group
- Established collaborative effort with DOE's HSS to baseline health and productivity of current management and operating (M&O) contractors' workforces
- Developed an approach for a complex-wide survey for addressing DOE Order 350.1, "Contractor Human Resource Management Program", M&O contractor policy issues
- Identified a grant proposal option to address contractor labor demands over the next 5 to 10 years, through use of Department of Labor survey tool

INFRASTRUCTURE MANAGEMENT

- Partnered with DOE on support of implementation of DOE Order 433.1, "Maintenance Management Program for DOE Nuclear Facilities"
- Developed white papers on sustainment models
- Initiated a three-phase effort to improve asset utilization across the DOE complex, with initial focus on application of the asset utilization index calculation
- Prepared a white paper on incorporating human performance indicators into infrastructure-related work control corrective actions

INTEGRATED SAFETY MANAGEMENT AND QUALITY ASSURANCE

- Developed a suite of human performance indicator implementation tools, including safety culture, work control process/work planning, root cause and event investigation (causal analysis), self-assessment, and training development and implementation
- Supported DOE's Office of Environmental Management Corporate Quality Assurance (QA) Board on top issues, with focus on flow-down of QA requirements (e.g., graded approaches to requirements application, supplier availability and evaluations, commercial grade dedication process, and line management understanding of QA and oversight responsibilities)
- Prepared a safety culture criteria white paper, and established a Safety Culture Task Team to assist DOE in improving integrated safety management implementation
- Initiated the Occurrence Reporting and Processing System Task Group, who developed a generic training module, and conducted training sessions
- Developed best practices on QA and quality control during construction
- Supported DOE's HSS on rewrite of the QA Guidance document supporting DOE Order 413.3 for more effective project management, and on review of Order 414.1C, "Software QA"
- Drafted an improvement plan for NNSA's QA program

PROJECT MANAGEMENT

- Continued to support DOE Office of Engineering and Construction Management's effort to develop a series of implementation guides to replace the Manual supporting Order 413.3. EFCOG representatives provided subject matter expert input and technical support on each of the 17 guides being developed
- Supported DOE in development of new DOE Orders on cost estimating and analysis, and held the second annual cost estimating workshop
- Initiated effort with the Project Management Institute to understand better the value of project management in research and development programs, and to capture that understanding in a white paper focused on DOE research and development programs
- Provided feedback to DOE on its new effort to update the Project Assessment and Reporting System (PARS)
- Continued to provide feedback to DOE on DOE's Corrective Action Plan to address the findings of the April 2008 Root Cause Analysis Report on Contract and Project Management

SAFETY ANALYSIS

- Held two key workshops: 1) the 18th annual Safety Analysis Workshop, and 2) Safety Basis workshop
- Initiated preparation of a white paper on integration of fire hazard analysis and documented safety analysis to address potential issues
- Published a paper on safety basis supplements as potential input to existing DOE directives
- Continued to analyze and support implementation complex-wide of DOE Standard 1189, with a focus on needed training, and a DNFSB concern regarding analysis of chemical hazards

SAFETY AND SECURITY REGULATORY

- Provided feedback to DOE's Office of Enforcement on: 1) issuance of civil penalties under 10CFR851 versus contract remedies, 2) credit for Voluntary Protection Program STAR status to offset 10CFR851 enforcement penalties, and 3) the proposed streamlined Investigation Summary Report template
- Conducted three peer reviews at DOE and NNSA sites
- Shared lessons learned from recent enforcement actions, integrated program reviews/peer reviews, Price-Anderson issues, and other interactions with the Office of Enforcement

SAFEGUARDS AND SECURITY

- Developed a proposed checklist for validation of provisions in the implementation of 10CFR824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violation"
- Completed a security metrics study and shared results with recommendations with NNSA
- Completed a draft report on proforce injury rates for DOE consideration
- Provided feedback on the policy revisions to the Impact Measurement Index
- Initiated work on revisions to the joint DOE-U.S. Nuclear Regulatory Commission Nuclear Materials Management and Safeguards System process
- Established a new Material Control and Accountability Subgroup

The report that follows for 2008 is organized and presented as follows:

- information on EFCOG membership, on the Board of Directors, and on the Working Groups
- individual reports on each Working Group's objectives/purpose/scope, membership, 2008 achievements, 2009 plans, effectiveness evaluations, lessons learned and recommendations
- information on the EFCOG web site and EFCOG finances

EFCOG MEMBERSHIP

Membership in EFCOG has continued to grow. By the end of FY 2008 EFCOG included 63 DOE contractors. These companies – CH2M HILL Plateau Remediation Company, Epsilon Systems Solutions, Inc., Northrop Grumman Shipbuilding, and Nuclear Fuel Services, Inc. – became new members during 2008. EFCOG’s member companies for FY 2008 are shown in Table 2.

TABLE 2. 2008 MEMBER COMPANIES

ABS Consulting, Inc.	L&L Associates, Inc.
Aecom Government Services	Lawrence Berkeley National Laboratory
AREVA Federal Services	Lawrence Livermore National Laboratory
Argonne National Laboratory	Lockheed Martin Information Technology
B&W Pantex	Los Alamos National Laboratory
B&W Y-12	Merrick & Company
Babcock & Wilcox Technical Services	Midwest Research Institute (NREL)
Bartlett Services, Inc.	National Security Technologies
Bechtel National, Inc.	Northrop Grumman Shipbuilding
Bechtel SAIC	Nuclear Fuel Services, Inc.
Booz Allen Hamilton	Pacific Northwest National Laboratory
Brookhaven National Laboratory	Parsons
Bullard Company	Pro2Serve
Burns and Roe Enterprises, Inc.	Project Enhancement Corporation
CDM Federal Programs Corporation	QinetiQ North America
CH2M HILL Plateau Remediation Co.	S.M. Stoller Corporation
CH2M Hill, Inc.	Sandia National Laboratories
CH2M Hill-SRS	Schneider Electric
CH2M-WG Idaho	Shaw Group
CSC Applied Technology Division	TerranearPMC, LLC
Dade Moeller & Associates	Tetra Tech FW, Inc.
EG&G Technical Services, Inc.	Theta Pro2Serve Management Company
EnergySolutions, LLC	TLI Solutions, Inc.
Epsilon Systems Solutions, Inc.	URS Washington Division
ESI International	UT-Battelle, LLC
Fluor Government Group	Vista Engineering Technologies, LLC
Fluor Hanford	Wackenhut Services, Inc.
Honeywell FM&T, LLC	Washington Closure Hanford
Idaho National Laboratory	Washington Savannah River Company
Jacobs Engineering Group	Washington TRU Solutions (WIPP)
Jefferson Science Associates, LLC	West Valley Nuclear Services Company
Kiewit Federal Group, Inc.	

BOARD OF DIRECTORS

As stated earlier, the Board of Directors is elected by the Executive Council from their membership, and serves as the governing entity for EFCOG's day-to-day operations. The Board added two new Directors during 2008, and met four times during the year to ensure that the activities of EFCOG are supportive of the overall objectives and are responsive to DOE's needs. Under the leadership of the Board of Directors, EFCOG's focus in the coming year is to continue to encourage other DOE contractors from all programs and all sectors to contribute to performance improvement and lessons learned activities. EFCOG's Board of Directors for 2008 is shown in Table 3.

TABLE 3. 2008 BOARD OF DIRECTORS

CHAIR	Pamela A. Horning	Lawrence Livermore National Security, LLC
VICE CHAIR	George W. Jackson	Fluor Government Group
VICE CHAIR ELECT	Mike H. Schlender	Pacific Northwest National Laboratory
DIRECTORS	Juan Alvarez	Idaho National Laboratory
	David B. Amerine	Parsons
	Michael J. Bebon	Brookhaven National Laboratory
	Mark Fallon	CH2M HILL, Inc.
	William Gallo	AREVA Federal Services, LLC
	Thomas F. Gioconda	Bechtel Group, Inc.
	Robert J. Giroir	EnergySolutions, LLC
	Albert Konetzni	West Valley Environmental Services
	Robin M. Madison	Los Alamos National Laboratory
	John G. Meyer	B&W Pantex
	Patricia N. Smith	Sandia National Laboratories
	Joseph R. Yanek	Fluor Corporation
	DIRECTOR EMERITUS	Dr. Dennis K. Fisher
Lincoln E. Hall		L&A Associates, Inc.
Donald W. Pearman		Bechtel National, Inc.

WORKING GROUPS



EFCOG had 12 active Working Groups at the beginning of fiscal year 2008, adding the Human Capital Working Group early in FY 2008, and adding the Waste Management Working Group at the end of calendar year 2008. During the year, the Working Groups focused on a number of critical initiatives. The Working Groups utilized teleconferences and meetings to exchange information and lessons learned, including infrastructure management, enhanced industrial/chemical and nuclear safety, improved project management, coordinated efforts on engineering

standards and practices, increased energy efficiency, improved acquisition practices, improved maintenance and infrastructure management, sharing of D&D best practices, and compliance with Price-Anderson Amendments Act requirements.

Each Working Group Chair has a charter approved by the Board of Directors. A Chairperson oversees the direction of each Working Group (with assistance from a Steering Committee). Working Group membership is comprised of individual subject matter experts interested in working on that particular focus area. A Sponsoring Director [shown as “Director” in Table 4 below] is the point of contact in EFCOG for advice and decision-making, while DOE and NNSA sponsors provide guidance, up-to-date information, advice, and support as required. The FY 2008 Working Groups are shown in Table 4.

TABLE 4. 2008 WORKING GROUPS

WORKING GROUP	EFCOG CHAIR [DIRECTOR]	DOE & NNSA SPONSOR(s)
Acquisition Management	Ami Peterson [Michael Bebon]	Ed Simpson, David Boyd
Contractor Assurance	Roland Knapp [Michael Schlender/ Pat Smith]	Arnold Guevara
Deactivation & Decommissioning	Russell Mellor [George Jackson]	Yvette Collazo
Energy Efficiency	Lynnwood Dukes [Juan Alvarez]	Albert Ream
Engineering Practices	Kenneth Keith [Tom Stevens]	Jim McConnell, Sandra Waisley, Jim O'Brien, Suneel Kapur
Environmental Safety & Health	Anthony M. Umek [Joseph Yanek]	Pat Worthington, Frank Russo
Human Capital	Jeffery Jay [Tom Stevens]	Beverly Berger, Bill Valdez, Diane Cochran, Mari-Jo Campagnone
Infrastructure Management	Denise Robinson [Pamela Horning]	Bob Herrera, Peter O’Konski, John Yates
Integrated Safety Management/QA	Norm Barker [David Amerine]	Pat Worthington, Frank Russo
Project Management	Clay Jones [Tom Gioconda]	Bob Raines, Dan Lehman, Paul Bosco, Jay Rhoderick, Thad Konopnicki, Jack Surash
Safety Analysis	Andrew Vincent [Robin Madison]	Dick Englehart
Safety & Security Regulatory	Bill Luce, Conard Stair [Greg Meyer]	Tony Weadock, Arnold Guevara
Safeguard and Security	Jimmie Mulkey [Michael Bebon]	Linda Wilbanks, Jim McConnell, Bill Desmond

WORKING GROUP REPORTS

ACQUISITION MANAGEMENT WORKING GROUP

CHAIR: AMI PETERSON, SANDIA NATIONAL LABORATORY

INTRODUCTION

The Acquisition Management Working Group (AMWG) is a proactive group of acquisition professionals representing a broad spectrum of Department of Energy (DOE) (including the National Nuclear Security Administration (NNSA)) facilities and prime contractors and subcontractors. Through collaboration and partnership, the AMWG endeavors to provide value-added support to DOE improvement initiatives related to prime contract and acquisition planning, placement, and/or administration and as required to facilitate attainment of DOE strategic goals.

The AMWG exists to facilitate the objectives of the EFCOG by enhancing the relationships between DOE and their prime contractors.

The objectives of the working group include:

- Create a forum in which the EFCOG membership and DOE acquisition management professionals can partner to achieve continuous improvement of the acquisition processes and build mutual trust and understanding among the DOE contractor community and the DOE staff.
- Support DOE's strategic goals and initiatives as they relate to the planning, placement and administration of prime contracts and acquisitions through a common understanding of DOE issues and organizational priorities, utilization of effective communications, and a willingness to provide value added input to requests for industry comments on proposed policies, directives, and regulations related to contracts and procurements.
- Promote a win-win relationship with shared priorities and a common understanding of acquisition and contracting issues through effective communications.
- Provide a venue to promote the sharing of contractor best acquisition and contracting practices.
- Effectively coordinate related efforts of the AMWG with other DOE contractor entities and other EFCOG Working Groups.
- Provide an industry perspective on proposed DOE changes in contract requirements.

The scope of the working group includes:

- Continuous improvement in the DOE acquisition systems as they relate to the planning, soliciting, awarding, and administration of prime contracts and procurements within the DOE complex.
- Communication with the DOE staffs, and participation in DOE initiatives relating to the contracts and procurement processes.
- Represent the EFCOG membership by assisting DOE staff in the identification of areas for improvement, the assessment of proposed policy and/or regulatory changes, the introduction of new or changed processes, and the gathering of information in support of any proposals or

initiatives. Additionally, the AMWG will, on an as needed basis, develop independent recommendations that serve to promote continuous improvement.

- Operate, as appropriate, in concert with other industry groups where there may be overlapping interests, ensuring a cooperative effort.

MEMBERSHIP

The AMWG membership is comprised of approximately 55 professionals representing 40 EFCOG member companies. These members are involved directly or indirectly with responding to and implementing DOE acquisition policy at Contractor locations.

ACHIEVEMENTS

The following is a summary of the accomplishments realized by the AMWG during 2008.

- Conducted two face-to-face Working Group and one teleconference meetings attended by an average of thirteen AMWG members that provided pertinent and timely information to all attendees on a variety of diverse acquisition management issues. Each meeting allocated specific time for discussion and presentations on topics of interest identified by the Working Group membership and DOE sponsors. These meetings also provided ample opportunity for candid and open dialog on non-agenda topics of interest to the DOE acquisition community. Minutes from the meetings were distributed to all AMWG members and DOE representatives for their information and comment. The date and location of each respective meeting was as follows:
 - June 6, 2008 Upton, New York
 - August 21, 2008 Teleconference
 - October 29, 2008 Washington, D.C.
- Continued to provide its members with numerous opportunities to benchmark and exchange information with other DOE contractors on common issues and topics to share lessons learned and obtain insight into best practices.
- Evaluated issues affecting contract transition, focusing specifically this year on severance packages and retention.
- Commented on the EFCOG white paper concerning imposition of fines and penalties under 10 CFR 851, versus the use of contractual remedies.
- Reviewed and discussed the potential impacts of several DOE orders that were being drafted; reviewed and discussed methods of implementation that will be used by prime contractors as a result of new or revised DOE orders that were issued.
- Continued to emphasize the importance and encourage participation of our membership on the DOE required contractor purchasing system peer reviews. Exchanged the schedule and status of the annual reviews and shared review results.
- Benchmarked prime contract revision processes and practices across the complex.
- Benchmarked work-for-others subcontract practices and made proposals to DOE concerning streamlining these processes.
- Reviewed the implementation of small business procurement rules exercised by prime contractors, the application of DEAR 936, and the practices of prime contractors in allowing their affiliates to participate in competitions.
- Discussed the impact of the FY 2009 Continuing Resolution on site budgets and operating flexibility.

- Conducted a survey of EFCOG DOE prime contractors concerning the significant costs in responding to DOE Requests for Proposals, with observations and proposed changes to the current acquisition process and practices. The survey results were briefed to the DOE AMWG sponsors, and will be provided to the EFCOG Sponsoring Director before the end of CY 2008, for approval and distribution to the EFCOG Board. Once the Board approves the survey, it will be provided to DOE.
- Reviewed and revised the AMWG charter and considered possible task groups under the new charter.

PLANNING FOR THE NEXT YEAR

The following is a summary of the activities and objectives established for the AMWG in CY2009:

- General Assistance: Provide, on an as needed basis, assistance in the form of reviews, comments, white papers, and any other general support related to acquisitions and contracts to the DOE Office of Procurement and Assistance Management, to the NNSA Office of Acquisition/Supply Management, to the DOE Environmental Management's Deputy Assistant Secretary for Acquisition and Project Management, and to the EFCOG Board of Directors.
- Small Business Initiatives: AMWG will continue to review, analyze, and report on new and evolving Small Business Administration and DOE initiatives involving procurements from and the use of small businesses, and the relationship of prime contractor practices to the procurement of sub-contracts.
- Safety: AMWG will continue to review, analyze, and report on issues involving prime contracts and subcontractor safety while working for prime contractors on the DOE sites.
- Analysis and Response to Proposed Rules, Regulations, and Directives Subgroup: The AMWG will continue to assess proposed DOE policies and regulations. When deemed appropriate, the AMWG will provide objective and constructive input to DOE and the EFCOG member companies on the potential impacts of these proposed actions.

EFFECTIVENESS EVALUATION

Benefits provided by the AMWG this past year included sharing of information and education of its members on common issues impacting prime contracts and procurements and the conduct of best practices survey of member companies concerning bid and proposal costs and best practices.

LESSONS LEARNED

The AMWG members have established valuable contacts and professional relationships with DOE and NNSA staff at many levels including senior management. These relationships are critical to enhancing the value of the AMWG. Particular emphasis has been and must continue to be placed on ensuring that the efforts and initiatives undertaken by the AMWG are aligned with the needs and expectations of the DOE procurement executives to maximize the effectiveness of the AMWG and the value provided to the Government. The AMWG can and must continue to build relationships with its Sponsors. The AMWG will continue to have opportunities to show them what can be done to assist them.

The AMWG must be responsive to the needs of the EFCOG member organizations. Many complex issues arise during the year involving contracts and procurement. The members of the AMWG have significant experience and expertise in problem recognition, avoidance, and resolution in these subject areas. The AMWG can be and is of significant value to help educate, answer questions, and inform the member companies of evolving issues and their potential impacts. As the AMWG members get to

know and trust each other with each meeting, there is a growing willingness to share information. The AMWG members are getting better at helping each other, which in turn helps improve responsiveness to the needs of its Sponsors.

There is a need to contact all Working Group member companies to optimize participation in the group. Meetings typically consist of approximately 15 attendees. Though the mix of prime contractor types is good, the participation should be larger including management and operating contractors and management and integration contractors from across the DOE complex. During 2009, the Chair will be contacting non-participants to update the membership list and encourage increased participation.

RECOMMENDATIONS

This Working Group should be maintained and should continue to pursue its objectives. The AMWG continues to have a positive impact on acquisition and prime contract management relationships with DOE, and has provided demonstrable benefits to the EFCOG membership in general. No Subgroups are needed for AMWG at this time.

CONTRACTOR ASSURANCE WORKING GROUP

CHAIR: ROLAND KNAPP, LOS ALAMOS NATIONAL LABORATORY

VICE-CHAIR: JANE FITZPATRICK, KANSAS CITY PLANT

INTRODUCTION

The objectives of the Contractor Assurance Working Group (CAWG) are to:

- Promote, coordinate, and facilitate the active exchange of successful approaches to performance-based integrated management systems as well as lessons learned.
- Identify, analyze and produce for distribution through DOE and NNSA Headquarters important lessons learned that could accelerate the implementation of effective federal line oversight and contractor assurance systems.
- Develop Line Oversight/Contractor Assurance System (LOCAS) case studies for future workshops / training courses.

MEMBERSHIP

Approximately 50 contractor representatives and DOE personnel are actively involved in this new Working Group.

During the year, several ad hoc teams have been formed to work on deliverables; however, no formal Subgroups or task groups have been formed.

ACHIEVEMENTS

The CAWG met twice during 2008 (April and October in Washington, D.C.).

Representatives from the Working Group have participated in other EFCOG Working Group meetings, the Annual Waste Management Symposium, and the DOE ISMS Workshop.

During 2008, the CAWG addressed the following topics:

- Use of industry standards in lieu of DOE Directives
- Highlights and challenges from DOE Office of Health, Safety and Security (HSS) inspections
- Corrective action effectiveness
- Effective use of lessons learned / operating experience programs
- Use of 3rd party certifications
- Requirements flowdown
- Use of human performance principles to produce tangible results
- Development of an approach to develop Leading Indicators

Working Group members have also actively participated on the HSS Safety Directive Project and the NNSA LOCAS effort.

PLANNING FOR THE NEXT YEAR

During 2009, the CAWG intends to focus on the following:

- Continue the development of Leading Indicators
- Continue to work with HSS to improve HSS Safety Directives
- Continue to work with NNSA on LOCAS
- Improve the use of lessons learned data and information to improve performance
- Use of project management and performance assurance tools with mission-oriented programs and large-scale non-construction projects
- Development of corrective action plans and effectiveness evaluation strategies
- Multi-dimensional risk acceptance protocol and communication

Many of these focus areas will involve participation from other EFCOG Working Groups, such as the ISM/QAWG on integration assessments and Leading Indicators.

EFFECTIVENESS EVALUATION

In its second year of existence, the CAWG has focused much of its energy on information-sharing among contractors. The support received from the DOE Office of Health and Safety, and NNSA has been excellent. The vision expressed by these management teams has been consistent with the vision of the participating contractors on the CAWG.

LESSONS LEARNED

Active participation of DOE counterparts (both Headquarters and site offices) in CAWG meetings has proven to be very effective. This has promoted better communication and has not stifled discussions.

RECOMMENDATIONS

The CAWG should continue to function in 2009, pursuing the plans above. The EFCOG Directors need to continue to identify opportunities for Working Groups to collaborate, avoiding the stovepipes that do not promote the effective use of resources.

DEACTIVATION & DECOMMISSIONING AND FACILITY ENGINEERING WORKING GROUP

INTRODUCTION CHAIR: RUSSELL MELLOR, URS/WASHINGTON

VICE-CHAIR: BOB RICHARDELLA, S.M. STOLLER CORPORATION

The Deactivation and Decommissioning (D&D) and Facility Engineering Working Group (DD/FEWG) provides leadership to focus on improving safety and reducing D&D life cycle costs across the DOE complex.

The DD/FEWG is a working committee whose intent is to facilitate the objectives of the EFCOG to partner with the Office of Deactivation & Decommissioning and Facility Engineering in DOE's Office of Environmental Management (EM) identifying and addressing key opportunities for improved performance in D&D safety and project execution across the DOE complex through application of experience, including lessons learned, and technology transfer. The area to be addressed by the DD/FE Working Group is facility D&D, including soil and groundwater remediation topics where they integrally relate to facility D&D. Facilities will be covered from the point of ceasing their operating mission through their final declaration of cleanup status. However, activities during the operating mission that prepare for efficient and safe D&D when the mission ceases will be also be within the scope.

The DD/FE WG is committed to the following objectives.

- Promote, coordinate, and facilitate the active exchange of successful D&D programs, practices, procedures, technology, and other pertinent information of common interest which have been effectively utilized by contractors and subcontractors for DOE facilities as well as in nuclear power plant decommissioning and other environmental cleanup scenarios.
- Identify, analyze, and produce for distribution through EM important lessons learned that could in a safe manner reduce life cycle costs of EM's D&D program.
- Develop D&D case studies for future workshops/training courses.

MEMBERSHIP

Membership of the DD/FEWG stands at approximately 40 participants, with 18 "active participants" (i.e., voting members), as well as twenty-two "interested parties" to receive communications about the Group's activities and occasionally contribute to those activities where their expertise is applicable. The Working Group conducts its business partly through its three Task Groups. The contractor members represent both DOE national laboratories and major DOE projects in the complex.

ACHIEVEMENTS

The DD/FEWG formed in early 2007 at the request of DOE's EM Office of Engineering and Technology to focus on D&D activities with the following goals:

- Improve identification, dissemination and implementation of D&D Best Practices across the Complex.
- Identify transformational changes that can be made to positively affect safety and the D&D baseline over the long term.

Members made significant progress in realizing these goals during the past year adding new D&D best practices to the existing EFCOG Best Practices database, participating in lessons learned forums, and contributing to a DOE initiative on identifying technology needs. Additionally, as discussed below, three Task Groups were formed to focus attention on the following initiatives:

- participating in a DOE project management initiative to develop implementation guidelines for DOE Order 413.3A.
- participating in a DOE radiological protection initiative to institute a more predictable and standardized approach to approving authorized limits and independently verifying cleanup completion at EM sites.
- and, launching a D&D Knowledge Resource Center to provide real-time solutions to D&D challenges.

The progress made during FY 2008 in accomplishing the DD/FEWG's objectives was guided by interactions of the full Working Group as follows:

- December 7, 2007 – fall/winter Working Group meeting (Dallas, Texas)
- May 28, 2008 – spring Working Group meeting (Oak Ridge, Tennessee)
- Numerous Task Group meetings and telephone conferences were also conducted.

Active members are committed to adding at least one new D&D best practice to the existing EFCOG Best Practices database. A review team coordinates comments and works with authors to ensure that the best practices added to the database truly add value and are of consistently high quality. The following seven D&D best practices have been fully through the process and appear in a new D&D category on the EFCOG Best Practices website:

- "Evaluation and Control of Airborne Fungal Populations for Worker Protection during the Deactivation of an Abandoned Process Facility,"
- "Post-Deactivation Surveillance and Maintenance of Excess Facilities,"
- "Use of Commercial Rigid Polyurethane Foam for Decontamination and Decommissioning,"
- "Implementation of National Fire Protection Association Arc Flash Requirements in D&D,"
- "Assets for Value Contracts,"
- "Open Air Demolition of Radiological Contaminated Structures," and
- "Achieving the First Record of Decision on a Canyon in the Complex."

Besides publishing work on the EFCOG Best Practices website, members of the DD/FEWG actively participated in forums to share best practices and lessons learned and stay abreast of developments internationally. Additional D&D best practices are in various stages of review and approval for posting on the EFCOG Best Practices website.

Members of the DD/FEWG are guiding future EM work products by contributing their own experience and knowledge from lessons learned and best practices to DOE initiatives. For instance, members provided input to DOE on D&D technology needs for incorporation into the 10-Year Engineering and Technology Roadmap directed by Congress. The roadmap's purpose is to identify gaps in technology that exist in the current EM program to achieve the safe and compliant disposition of legacy wastes and facilities from defense nuclear applications and to provide a strategy to address those identified gaps. Work on other DOE initiatives is covered below under the applicable Task Groups. Work on all these initiatives has included direct interface with DOE EM personnel and the active participation of the DD/FEWG DOE Sponsor and her staff.

During 2008, members supported technology development activities by demonstrating the effectiveness of three materials for the stabilization of exterior painted surfaces on aging facilities at ORNL and supported an assessment of open air demolition experience in Oak Ridge and Richland.

TASK GROUP ACHIEVEMENTS

DOE 413.3A EM Clean-up Projects Guide Review - This Task Group has provided input and review during development of implementation guidelines for DOE Order 413.3A, "Program and Project Management for the Acquisition of Capital Assets." DOE is replacing the DOE M413.3, "Project Management for the Acquisition of Capital Assets Manual" with a set of guides, one of which is "EM Cleanup Projects." The Task Group's involvement with DOE G 413.3-8, "EM Cleanup Projects," helped establish clear and executable means of implementing project management requirements from the Order in the unique context of environmental cleanup projects, including D&D projects.

Independent Verification of Cleanup Review - This Task Group has provided input and review to DOE on a radiological protection initiative to institute a more predictable and standardized approach to approving authorized limits and independently verifying the completion of cleanup at EM sites. DOE has several radiological protection requirements relating to the release of radiologically contaminated property, both real and personal. These requirements include 10 CFR 835, "Occupational Radiation Protection," and DOE Order 5400.5, "Radiation Protection of the Public and the Environment." The initiative seeks to establish a systematic DOE EM program to implement these requirements and evaluate field and contractor adherence to these requirements. Task Group members coordinated with the EFCOG Environmental Safety and Health Working Group's Radiological Protection Subgroup to provide comments beginning in 2007 on the proposed EM Headquarters Authorized Limit and Independent Verification Business Plan. This Task Group's members commented on release of real property (i.e., real estate) and the Radiological Protection Subgroup commented on release of personal property (i.e., material leaving a site). During 2008, independent verification was performed on sites on the Oak Ridge Reservation in support of the EM closure project.

D&D Knowledge Resource Center Implementation - This Task Group continued to develop and maintain a D&D Knowledge Resource Center as a front-line effort to disseminate and implement lessons learned and information on best practices to provide real-time solutions to D&D challenges across DOE. The D&D hotline and an associated website – both functional in 2008 – are an extension of the existing successful and frequently used As Low As Reasonably Achievable (ALARA) hotline set up and maintained by the ALARA Center at the Hanford site. To ensure a successful outcome, the task team for the effort developed an implementation plan that defined the purpose of the D&D Knowledge Resource Center; defined the topics to be covered; specified staffing that includes using DOE interns in ready contact with D&D Subject Matter Specialist points of contact across the Complex; and discussed advertising the availability of the website. Implementation planning also considered the necessary approvals and arrangements for contingency staffing to ensure sufficient resources are committed for a successful outcome.

DOE supported the effort by funding a summer intern from Florida International University to work on the project at Hanford. By October 2007, draft implementation products, including web-site plans, were circulated for review and comment by the full DD/FEWG. A member of the DD/FEWG is integral to the operation of the now fully-functional hotline as part of his regular job responsibilities.

Florida Institute University development of the D&D Knowledge Management web site is continuing. EM is providing management direction, and the Working Group and others are providing technical input. In addition, DD/FEWG members act as subject matter experts to answer hotline and website inquiries. The Working Group has also established a network of points of contact at the major DOE

sites. These individuals are a resource for requests for site-specific information and are accessible to the Hotline and website staffs. A brochure (attached) was developed by the DD/FEWG to advertise the hotline and Knowledge Management website. At this point, the Working Group's involvement in further development is primarily in a consulting role.

PLANNING FOR THE NEXT YEAR

The next meeting of the DD/FEWG is being planned for March 5, 2009 to be held in conjunction with the Waste Management 2009 conference in Phoenix, Arizona. At the meeting, current membership will be re-assessed and targets set as necessary to cultivate adequate representation and participation from sites across the complex and major contracting companies.

In the coming year the DD/FEWG will continue to support the initiatives described above. Those initiatives involving input and review of DOE products will be supported as the DOE's schedule for accomplishment dictates. Metrics will be developed by which to evaluate effectiveness of the D&D Knowledge Resource Center, once the website is fully operational.

Besides continuing work on the initiatives, the remaining D&D best practices are targeted for posting to the EFCOG Best Practices website by the end of September 2009. The new DD/FE best practices are being placed into a specific D&D category that anyone interested in D&D can readily access. During the coming year these D&D best practices will also be reviewed for applicability to, and inclusion in, other categories on the website. Furthermore, existing best practices in the database will be reviewed for applicability and addition to the D&D category. These parallel reviews will create a cross-fertilization that amplifies the effect of the best practices effort.

Three major areas of emphasis during 2009 will be:

- Development of a presentation package that makes a compelling case for demolition of facilities,
- Continued integration and coordination with the DOE EM D&D Tool Box Project to demonstrate and deploy emerging technologies, and
- Greater involvement of the Working Group in industry/commercial forums.

Opportunities to present more papers born from activities of the DD/FEWG will be identified and committed to for 2009. The DD/FEWG objective to develop D&D case studies for future workshops / training courses will also be revisited as an area for potential growth.

EFFECTIVENESS EVALUATION

While an objective evaluation of effectiveness is difficult to make for work that involves reviewing and providing input to DOE EM products, the fact that the DD/FEWG was requested to participate in four different initiatives (one completed, two on-going, and one new opportunity) during its full first year indicates that value is seen in the input and feedback provided by the members. More objectively, the addition of seven D&D best practices to the EFCOG Best Practices web site and the presentation of papers on D&D lessons learned and best practices in major industry forums marked the beginning of improved dissemination of lessons learned and best practices among D&D leaders in the industry. Lastly, the DD/FEWG's launching of the D&D Knowledge Resource Center will begin to produce measurable results in the coming year by which to provide a particularly objective evaluation of effectiveness of that effort.

LESSONS LEARNED

The DD/FEWG members are engaged and committed to ensuring value is added by the actions that are taken. Active membership was refined through this first year as those who demonstrated a willingness to engage and produce concrete products and results emerged. Members' time demands were particularly acute due to many of the members being directly involved in the abnormally high number of EM contracting activities this year, making the members' efforts on the DD/FEWG all the more noteworthy. Requiring active members to contribute to the best practices effort was helpful in establishing individuals' personal commitment to accomplishing the Working Group's objectives. The use of Task Groups to focus on specific initiatives allowed members to take leadership of projects that are of particular interest to them and successfully multiplied the effectiveness of the Working Group.

RECOMMENDATIONS

The DD/FEWG should continue functioning in 2009, pursuing the plans described above as structured with Task Groups ensuring an on-going focus on specific initiatives.

The D&D Knowledge Resource Center has particular potential to add enduring value to the DOE EM mission. Continuing support by EFCOG is recommended to ensure continued successful implementation in 2009.

ENERGY EFFICIENCY WORKING GROUP

CHAIR: LYNNWOOD DUKES, SANDIA NATIONAL LABORATORY

VICE-CHAIR: ERNIE FOSSUM, IDAHO NATIONAL LABORATORY

INTRODUCTION

The Energy Efficiency Working Group (EEWG) is a working committee whose intent is to facilitate the objectives of the Energy Facility Contractors Group (EFCOG) as related to the particular areas of energy costs, usage, and conservation awareness.

The purpose of the EEWG is for members to promote excellence in Department of Energy programs by sharing information and lessons learned, energy efficiency, and by facilitating the application of information and techniques to the degree appropriate for their contract/facility. The areas of contractor interest covered by energy efficiency include, but are not limited to: energy generation, energy usage, utility systems, conservation techniques, and communication of energy efficiency information.

The objectives of the EEWG are to:

- Promote energy efficiency by sharing management, technical, and financial information among contractors through vehicles such as workshops, subgroups, and seminars.
- Promote, coordinate, and facilitate the active exchange of successful energy efficiency programs, practices, procedures, lessons learned, and other pertinent information of common interest to energy usage which have been effectively utilized by contractors for DOE facilities.
- Strive to meet DOE energy efficiency goals.
- Promote and demonstrate renewable energy technologies.
- Provide planning and actions necessary to ensure that the overall objectives of EFCOG are met.

MEMBERSHIP

The EEWG membership is comprised of approximately 45 members representing national laboratories, M&O contractors, energy management firms, field operations, and support.

ACHIEVEMENTS

- Held the annual Working Group meeting in conjunction with DOE's Federal Energy Management Program (FEMP) GovEnergy Conference. Over 40 EEWG members attended with 11 FEMP staff present.
- Hosted four teleconferences on energy savings performance contracts (ESPCs), Metering, Water Guidance, and Renewable Energy Projects (sharing lessons learned, providing feedback on guidance).
- The EEWG website has been updated with an Information Tab where all new publications, guidance documents, energy plans, water plans, lessons learned, innovative ideas and latest information is posted to allow easy access and limit email traffic.
- Coordinated responses to revised DOE Order 430.2B, "Departmental Energy, Renewable Energy, and Transportation Management".
- Facilitated information between FEMP and Working Group members, including surveys, data gathering, draft guidance review, and execution plans.

- Interfaced with Infrastructure Management and Environmental Safety and Health Working Groups.
- Continuing to promote and support the Transformational Energy Action Management (TEAM) Initiative led by Bob Westby of NREL.
- Conducted surveys, data gathering, draft guidance review, and execution planning for implementing DOE Order 430.2B.

The annual meeting of the EEWG was held on August 6th and 7th following the EGov Conference in Phoenix, Arizona. Numerous sites and HQ departments were represented by the attendees. The meeting was formatted around open discussion of various agreed-to issues and topics, as highlighted below:

FEMP HQ UPDATE

- Review and comments on the new DOE Order 430.2B.
- Executable plans on how the sites will incorporate the 5 or 6 main areas of 430.2B are due by the end of CY 2008. There is currently no guidance on length or breadth of the Executable Plans. Several sites indicated that they were simply updating their existing Energy Management Plan.
- Designs that are 30% more efficient than American Society of Refrigerating, Air-conditioning, and Engineers Standard 90.1.
- Sustainable design and water conservation should be pursued for the purposes of energy efficiency.
- New forthcoming rules from FEMP will only cover new buildings,, but that the EEWG will have an opportunity to review the proposed new rules.
- The DOE Facilities Information Management System (FIMS) will now have a field for Excluded Buildings. Rather than submitting a manually prepared list of Excluded Buildings as in years past, sites will now input these buildings into FIMS along with a justification and description of exclusion part being claimed. This information will remain in FIMS until something changes.

TEAM INITIATIVE UPDATE

- Highlighted the four ESPC projects that have been signed, and that there are an additional 16 projects currently being developed.
- The Executable Plans are being developed to present to the incoming administration so that the projects can continue to move forward. This is consistent with the TEAM Initiative, the intent of which is to transition to the new Administration with a working solution and plans for accomplishment of the DOE Order goals.
- Looking forward – Both presidential candidates are planning ambitious energy policies and energy will likely be on the issues addressed in the new administrations first 100 days. May be a new Executive Order and reenergized program funding.
- ESPCs need to address water management and Renewables, which have been neglected in the past.
- ESPCs should get larger with consideration for the “whole site”.
- ESPC audits can count for the Energy Independence and Security Act audits.
- Congress wants to see maximizing of ESPC projects including 3rd party-funded projects.
- Asked for interest in establishing a subgroup to the EEWG that would concentrate on renewables, with and emphasis on including with ESPC projects.
- DOE Pilot Utility Data Management System.
- Contracting to develop the data management system. A narrative was provided on how FEMP is planning to accomplish.

- Survey conducted last fall, responses were varied and DOE is currently evaluating where to go next.
- Phase One: Prototype demonstration at four sites or areas such as Headquarters, Brookhaven National Laboratory, Oak Ridge National Laboratory, and National Renewable Energy Laboratory.
- Phase Two: 80/20 Rule and address utilities and program issues.
- Phase Three: 20/80 Rule – cleanup.
- This activity will be Department-wide.

DOE ORDER 430.2B DISCUSSION

WATER REDUCTION GOALS

- LBNL is using ESCo to evaluate water saving opportunities. As far as water goes, it appears that labs are moving from waterless urinals to pint flush units. Appears that waterless urinals have had common maintenance and use issues. DOE suggested a lessons learned document.
- FEMP website includes water best management practices and case studies and is being updated. It was suggested that there are other numerous sources of information and tools such as water audits, Water Management Plans, and water balance activities.
- It was suggested a subgroup be formed to develop a white paper on lessons learned to post on the EFCOG website and DOE suggested developing and distributing a spreadsheet to send out to distribution. Final path forward appears to be a topic of continued discussion during a later teleconference.

15% SUSTAINABILITY REQUIREMENT

- There appears to be considerable debate on the 15% requirement, as is 15% of total building numbers or 15% of total square footage. There is indirect guidance defining as 15% of total buildings. This is a subject where the EEWG should weigh in and send real-world recommendations to DOE Headquarters. It was generally understood that the 15% applied to total square footage at a site.

LEED GOLD AND LEED EB

- All projects are at DOE Order 413.3 Critical Decision (CD)-1, but if not to CD-2 on October 1, 2008 are subject to Leadership in Energy and Environmental Design (LEED) Gold.
- It is currently assumed that if a building achieves LEED Gold, then it achieves the Guiding Principles. There may be exceptions. If a LEED Existing Building rating is obtained, then a building may or may not meet the Guiding Principles. DOE suggested that a building at LEED Gold will satisfy High Performance Sustainable Building criteria.
- There is uncertainty about whether leased buildings are included in the 15% requirement, as the Pacific Northwest National Laboratory Chief Financial Officer says that leased facilities cannot be upgraded with Federal funding. DOE stated that it is not in favor of including leased buildings as part of Goal Subject Buildings.

ENERGY SECURITY AT DOE FACILITIES

- Recommended partnering with local utilities for energy security and peak power management.
- Renewable Energy has its own stability issues such as base loading, biomass storage, utility interfaces, long-term generation, and long-term outages.

ESPC DISCUSSION FORUM

- The most significant topic of discussion was the Internal Support Costs. A question was posed as to whether one can use Work for Others funding to cover the Internal Support Costs.
- Oak Ridge National Laboratory stated that they are using the ESPC process to accomplish their Comprehensive Audits. DOE suggested that once a facility achieves the goals, then it can be considered “done”.
- It was suggested that an ESPC project would be developed much smoother if the internal funding issues are worked out before the project is fully developed.
- Lessons learned with an emphasis on performance period administration were discussed. Continuity needs to be addressed through documents containing the who, what, where, and when to reduce issues with personnel changes that will certainly happen on the extended contract terms.

PLANNING FOR THE NEXT YEAR

The following is the path forward for 2009 for the EEWG:

- Water Issues: Compilation and distribution of Lessons Learned.
- ESPC: Compilation and distribution of Lessons Learned. Internal support cost issues.
- Comprehensive Energy Audits: Major issue, 25% and 15% requirements.
- Excluded/Covered/Leased Buildings: Need to discuss and draft a request to FEMP for clarification.
- Executable Plans: How and format. DOE’s guidance needs to be distributed.
- Renewables: Discuss how to implement with ESPCs or alternative funding mechanisms. Taking an integrated approach across the agencies.
- EEWG will continue to have involvement in the TEAM Initiative Working Group to ensure coordinated approaches to energy conservation.
- EEWG will also continue to take a comprehensive customer focused approach responsive to FEMP’s vision to assist DOE and other Federal agency sites increase energy efficiency, conserve water, promote renewable energy technology use and manage energy costs.
- EEWG will continue to assist DOE’s Federal Energy Management Program with timely and effective communication between sites, field and operations offices and Headquarters.
- EEWG will also continue to increase communication and participation of energy management professionals from DOE, other federal agencies and other appropriate EFCOG Working Groups at workshops to extend the pool of knowledge available to support DOE’s energy management initiatives.

EFFECTIVENESS EVALUATION

The EEWG has increased its value to the DOE through the type of communications demonstrated in 2008, especially in the issues of energy costs, usage, and conservation awareness. It continues to be the appropriate forum in which to provide a sounding board on these issues.

LESSONS LEARNED

In the current environment and focus on energy reduction it is imperative that these efforts are coordinated across all sites and that the TEAM Initiative efforts are integrated with the EEWG efforts. If a reasonable approach is not taken, valuable funds will be ineffectively utilized to achieve questionable results.

RECOMMENDATIONS

It is recommended that the EEWG be continued, but consideration should be given to combining this Working Group with the Infrastructure Management Working Group given the extent of overlapping areas of interest. Also, administrative assistance and minimal funding to acquire dedicated resources would be of significant value to the group in order to make progress on key issues.

ENGINEERING PRACTICES WORKING GROUP

CHAIR: KEN KEITH, OAK RIDGE Y-12

VICE-CHAIR: CHARLES KRONVALL, CH2M HILL PLATEAU REMEDIATION COMPANY

INTRODUCTION

Formed in mid-2003, the Engineering Practices Working Group (EPWG) completed its fifth full year of enhancing engineering effectiveness in the DOE complex. During this time, the Working Group has grown and matured in both primary and subgroup membership, achieved recognition in efforts from both the Department and the Defense Nuclear Facilities Safety Board (DNFSB). Notable successes have been the EFCOG paper “Design Adequacy of Safety Systems”, development of DNFSB 2004-2, Confinement Ventilation Evaluation Guidelines and implementation strategies, approaches to integration of safety into the design process for DOE-STD-1189, “Integration of Safety into the Design Process” , and implementation activities associated with 10CFR851, “Worker Safety and Health Program”.

The purpose of the EPWG is to promote engineering excellence in the execution of DOE missions by sharing best industrial practices, applying lessons learned and providing integrated recommendations to DOE officials.

The EPWG’s scope includes the areas of engineering practice that are associated with DOE facilities, programs, and capital acquisitions. This includes the application of engineering practices throughout the lifecycle of DOE facilities, including initial design and construction, commissioning, operation and maintenance, decommissioning, and closure. Engineering practice is the application of engineering disciplines and processes as governed by national codes and standards, recognized quality standards, and DOE orders and regulations.

MEMBERSHIP

There are total of approximately 160 members in EPWG, including the members of the Working Group, and additional members in the 4 Subgroups (as of the end of 2008: Configuration Management, Fire Protection, Testing and Commissioning, and Value Management) and one Task Team (Pressure Safety).

ACHIEVEMENTS

In 2008, EPWG continued to build on its successes and recognition as a group of substance with further requests from DOE & NNSA and EFCOG for support on several important initiatives. These included:

- Continued support in the development of DOE-STD-1189, “Integration of Safety into the Design Process”.
- Review of Implementation Guides to support DOE Manual 413.3, “Program and Project Management for the Acquisition of Capital Assets”.
- Review of Fire Hazards Analysis and Documented Safety Analysis integration guide.
- Support in development of a new safety instrumented system standard.

These initiatives were performed in close cooperation with other EFCOG groups, especially the Safety Analysis, Project Management, and Integrated Safety Management and Quality Assurance Working

Groups. A new subgroup was formed and chartered to share lessons and experiences in the area of Testing and Commissioning.

The breadth and significance of the topics being addressed by Engineering Practices demonstrates that the group is making positive contributions through helping the DOE to establish complex-wide programs and practices, enhancing engineering effectiveness via subcommittee and task activities, and sharing of lessons learned and best practices between EFCOG member companies.

EPWG meets four times per year, twice via nationwide teleconference, and twice face-to-face. At the meetings, task teams report on progress, new focus areas are discussed, new task teams are formed and pertinent lessons are shared.

Four EPWG meetings were held in 2008:

- January 23: nationwide teleconference
- May 6-7: general meeting at Richland, Washington
- August 6: nationwide teleconference
- October 28-29: general meeting at Aiken, South Carolina

Accomplishments in the EPWG focus areas were:

- **DOE-STD-1189, "Integration of Safety Into the Design Process"**– EPWG continued to play a significant role in support of the Department's important efforts to address Congressional and DNFSB concerns with major projects. The Standard's intent is to provide guidance and clarify expectations on the integration of safety with the design process while describing the roles associated with this evolution. Most importantly, the Standard sets the expectations to establish key safety decisions early in the project evaluation process to avoid some of the well publicized DOE project failures of the past few years. In addition, guidance on documenting these decisions and obtaining concurrence with key stakeholders is provided through the Safety Design Strategy. With EPWG directly supporting the writing team, the Standard was issued in March 2008. Following the release of the Standard, EPWG, in conjunction with the Safety Analysis Working Group's May meeting hosted a one-day DOE Standard 1189 Workshop. Approximately 200 were in attendance to hear implementation lessons from several sites targeting different aspects of the Standard including Safety Design Integration Teams and the new seismic requirements, among other topics.
- **Pressure Safety Task Team** – Following successful 10 CFR 851 implementation, members requested additional experience sharing in the area of pressure safety. Specifically, the team aims to develop a standard understanding of the requirements of an effective pressure safety program as required by the Worker Safety and Health Program, 10 CFR 851 Appendix A Section 4.0. Working with the ISM and QA Working Group, two meetings and several organizing phone calls were held during the initial year of team existence. 32 members have been identified, and a pressure vessel SharePoint Site has been established. This team is working to raise awareness of pressure safety program aspects and quickly accelerate sites with relatively new programs to experienced, well based programs.
- **Safety Class and Safety Significant Instrumented Systems Standard** – EPWG has supported DOE's Office of Health, Safety, and Security (HSS) in the development of a new standard to provide guidance on design of safety instrumented systems. The Standard is drawing from American National Standards Institute/International Society of Automation 84.00.01-2004, Functional Safety: Safety Instrumented Systems for the Process Industry Sector. A draft of the

standard has been developed and discussion continues with the Safety Analysis Working Group to achieve consensus on a graded application of requirements.

- **Evaluate alternatives to IEEE for Safety Class/Safety Significant Power Design** – The EPWG previously agreed to evaluate development of a DOE-specific standard for safety electrical power in lieu of commercial nuclear power IEEE standards. Early efforts resulted in the development of a preliminary scope plan for the effort. The task group subsequently developed a draft formal task plan for the effort. Loss of all key lead personnel on this effort to new company assignments and retirement has stalled the effort. With new, large nuclear facility design efforts underway, the manager of NNSA's Office of Safety reissued the challenge to address this topic. As a result, this activity will be one of the focus areas for 2009. This effort is judged to provide significant benefit in a more tailored and consistent set of requirements for safety systems power for the DOE complex.
- **HSS Assessment Findings Evaluation for EPWG Actions** – In 2007, EPWG identified areas generic to the complex appropriate for action from a review of DOE HSS's recommendations and opportunities for improvement from:
 - Essential System Functionality, January 2006
 - Safety System Engineer and Oversight Programs, March 2006

Actions under taken by the group to develop/compile best practice improvement recommendations and their status include:

- Engineering calculations (e.g. depth and rigor of documentation, input and assumption identification, input and assumption management) – a Best Practice has been developed and accepted by the group. The Best Practice is currently in the process of being posted on the EFCOG website.
- System performance monitoring and trending programs (e.g. expectations for system engineers to monitor assigned systems, attributes to be monitored, methods to document, confirmation that system performance meets safety basis expectations) – a draft Best Practice has been developed based on input from several of the sites with existing programs. The draft identifies expectations for cognizant system engineers in monitoring the health and aging of their system. The Best Practice is under review and expected to be posted in the coming calendar year.
- Safety equipment list – the Configuration Management Subgroup has taken on the task of developing guidance on expectations for a safety equipment list. A Best Practice paper has been developed and is under review.

In 2008, the EPWG revisited more recent DOE HSS assessments. Additional common issues were noted across the complex in the areas of engineering design and authorization basis, and safety system oversight (relates directly to system engineering program). The group is currently organizing a concerted effort to share site lessons in response to the system engineering program issues. EPWG is also coordinating with DOE's Safety System Oversight (SSO) representatives to share plans and identify common areas of focus. EPWG has been invited to follow-up a presentation by the EPWOG chair at last year's SSO meeting with full representation at their planned spring meeting. This topic is relevant also to DNFSB staff visits to several sites over the past year.

- **Non-nuclear Focus Group** – As many sites have limited nuclear related activities, there is a need to focus a portion of the EPWG activities on non-nuclear items. In 2006, the Group agreed to establish a lead for this focus area initially with the possible growth to have the EPWG leadership structure modified to include an overall chair, and separate vice chairs for Nuclear and Non-Nuclear Activities. As all sites involve non-nuclear related engineering

activities, sharing of lessons and experience to drive cost efficiencies approaching commercial practice is a continual theme. EPWG includes discussion of this area in meetings to foster sharing. Many sites have graded approach practices that may be beneficial for other sites to implement to improve their overall effectiveness in this topical area. In addition, spin-off activities have been initiated within the Configuration Management Subgroup to explore, develop, and publish best practices for configuration management of non-nuclear systems/structures/components in nuclear facilities.

SUBGROUP ACTIVITIES

Fire Protection Subgroup (Chair: Perry D'Antonio, Sandia National Laboratory): The Fire Protection Subgroup continues to provide a forum for members to ask questions and to disseminate information. In the last year, the Subgroup has shifted focus from 10CFR851 implementation to supporting the DOE's response to DNFSB Recommendation 2008-1, "Safety Classification of Fire Protection Systems". Several members are directly supporting activities to develop positions responsive to the recommendation. Activities include design expectations (e.g., single failure, National Fire Protection Association (NFPA) requirements), quality requirements, and classification of system components or supporting systems. These activities are teamed with the Safety Analysis Working Group.

Another focus of the Subgroup has been the development of leading indicators. Leading indicators can become an important component of the DOE's Contractor Assurance System and a focus of the EFCOG Contractor Assurance Working Group. A broad set of indicators, led by Sandia National Laboratory, is being reviewed by the Subgroup for broader application.

To support the efforts of the Subgroup, monthly conference calls and one meeting were held. The meeting was held in conjunction with the DOE Fire Protection Workshop (May 2008) to best use limited resources.

Configuration Management Subgroup (Chair: Cherri DeFigh-Price, SRS Parsons): The EPWG Configuration Management (CM) Subgroup continued revitalization efforts to address mainstream CM issues. The group held a meeting May 7, 2008 in conjunction with the EPWG meeting in Richland, Washington. In addition, phone conferences were held during in January and October..

Current activities in the CM Subgroup include the following three areas:

- Safety Equipment List development, maintenance and control. The Subgroup has submitted a Best Practice to the EPWG for approval.
- A need was identified for development of a recommended minimum set of documents needed for a Category II nuclear facility. Data collected from the sites was generally consistent. Agreement was reached that this was ready to develop into a draft white paper. It was agreed that the Subgroup should collect as much data from the architect-engineer for new facilities as possible, but that much of that was for the record and did not require a formal update schedule.
- Software Configuration Management. This best practice provides a simplified method for qualifying and managing commercial off-the-shelf engineering design and analysis software applications to comply with DOE Software QA requirements. The Best Practice is currently under review by EPWG for approval.
- The Subgroup completed a survey of software systems used at nine different DOE sites for configuration management. As part of this survey, the Subgroup included points of contact for each area and software to facilitate sharing successes and information. Several members are upgrading or replacing their electronic systems and have found the information useful.

- Rosters for the Subgroup as well as subject matter expert rosters for CM (total of 3 separate listings) were updated.

Other best practices are under consideration including definition of “as-built” drawings, change control during major project design, and configuration management during Deactivation and Decommissioning, among others.

Engineering Standards Subgroup (Chair: Stan Palmer, Idaho Cleanup Project): Engineering Standards was largely inactive in the past year. Based on the decreased focus and attention in this area, the Working Group agreed to eliminate this Subgroup. If items arise in the future of a similar nature, focused groups will be organized to address specific items.

Value Management Subgroup (Chair: Richard Harrington, Washington Closure Hanford): The Value Management (VM) Subgroup 2008 annual meeting was conducted on June 11, 2008, during the Society of American Value Engineers (SAVE) International Conference in Reno, Nevada. The meeting was well attended with representatives from Hanford, Yucca Mountain, Idaho National Laboratory, the U.S. Department of State, and Army Corps of Engineers. Updates were given from each site on 2007 VM studies completed and current 2008 VM plans.

The DOE Annual 2007 Value Management/Value Engineering (VM/VE) Report has been formatted and is awaiting authorization from DOE-HQ Office of Engineering and Construction Management (OECM). Excluding any objections from OECM, this report will be posted on the EPWG VM Subgroup web page. The 2007 report identified 15 VM studies completed with a potential of nearly \$128M in cost savings/avoidance. OECM may use this report to fulfill the annual VE progress report as required by DOE Policy 413.2, OMB Circular A-131, and Public Law 104-106.

Pressure Safety Task Team (Chair: Tom Etheridge, Oak Ridge National Laboratory): The Pressure Safety Task Team initiated in 2007 has quickly grown and attracted a diverse group of DOE sites, contractors, and others including the Thomas Jefferson National Accelerator Facility and the Stanford Linear Accelerator Center. Two meetings were held during the year – one in Las Vegas, Nevada in March, and a second in conjunction with the EPWG fall meeting in Aiken, South Carolina. Both meetings were well attended (approximately 25 people attended each meeting). The group has fostered significant sharing of programs, procedures, and practices. Several of the members are also members of American Society of Mechanical Engineers Boiler and Pressure Vessel (ASME B&PV) code committees. These affiliations and stature of the group members provides real time resources for questions associated with ASME B&PV code interpretation.

The Chairman of the DOE Headquarters Pressure Safety Committee has requested the Pressure Safety Task Team to become actively involved in recommending pressure safety policy and practices within DOE and to work closely with the DOE Pressure Safety Committee. Most DOE site representatives on the DOE Pressure Safety Committee are actively participating in the Pressure Safety Task Team including the DOE Headquarters Chairman.

Based on the group activities to date and membership, discussions are underway with the ASME High Pressure Systems Code Committee for the group to support maintaining criteria for barrier design of pressure systems.

Testing and Commissioning Subgroup (Chair: Doug Messerli, Oak Ridge Y-12): A new subgroup was proposed and organized in the last year. The Testing and Commissioning Subgroup was established to promote excellence in DOE testing and commissioning programs through sharing information, resources, knowledge, talents, applying lessons learned, and providing integrated recommendations

for improving performance to DOE. A charter for the new group has been developed and approved by the EPWG. The Subgroup presently has about 14 members.

PLANNING FOR THE NEXT YEAR

EPWG has the following initiatives planned for 2009:

- Follow-up activities related the health and safety assessments discussed previously will be a key focus area for the group. Best practices in the areas noted will be compiled and disseminated to the member companies to enhance performance in the areas noted. The actions and practices will be developed in concert with the DOE HSS and Safety System Oversight to achieve common expectations for system engineering programs. This will continue the theme of teaming with DOE to improve engineering effectiveness in the complex. In addition, interaction with the Safety Analysis Working Group is expected where best practices may relate to safety basis management.
- Continue support to HSS for development of safety instrumented system standard. It is anticipated that the draft standard will be released for DOE-wide review and comment in the coming year.
- Continue support to DOE on the response and implementation to DNFSB 2008-1 actions.
- Re-organize effort to develop DOE standards in lieu of IEEE standards for electrical power safety systems.
- Support DOE in the implementation of DOE Standard 1189 in conjunction with the Safety Analysis and Project Management Working Groups. This will include developing best practices on application and supporting a revision of the System Design Description Standard to address use in the integration of safety and design during project implementation.
- Based on a request from NNSA's Office of Safety, support NNSA and DOE on the development of a technical position to address actions appropriate for potential significant HEPA filter loadings under fire scenarios.
- The Fire Protection Subgroup plans for the upcoming year include:
 - Developing a consensus position proposal for applicability of DOE O420.1B to leased facilities;
 - benchmarking site Authority Having Jurisdiction programs, particularly looking at roles, responsibilities, authorities and accountabilities;
 - Benchmarking fire barrier penetration seal configuration management practices;
 - Benchmarking of site fire protection design criteria (international codes vs. NFPA);
 - Develop and post Fire Hazards Analysis Tool Box; and,
 - Develop updated fire protection system and equipment inspection, testing and maintenance recommended frequencies.
- Configuration Management Subgroup intends to accomplish the following: Meetings and/or phone conferences are planned for early 2009. Focus will be to update/adjust goals from 2008. Goals previously established and plans for the upcoming year include:
 - Develop and issue Best Practices. Minimum of 2, aiming for 3-5. Specific assignments have been made for nine specific subjects, with drafts due by mid-January 2009 to support the next scheduled teleconference. These include:
 - "Maintaining CM in Work packages during D&D"
 - Version and formal change control during design
 - Design Deliverables at 30-60-90-100%
 - Facility Design Descriptions and System Design Descriptions as design tools first, then deliverables

- "As Built": definition (versus "as found") – who is responsible, graded approach, confidence level
- Title III services by original architect-engineer
- Software configuration management
- Vendor information (formats, control, cataloging)
- Major modifications to operating facilities – special considerations
- The Value Management Subgroup will continue to be promoted or demonstrated across the complex. During the coming year, it is planned to collect and summarize VM/VE efforts from 2008.
- Pressure Safety Task Team plans for 2009 are:
 - to continue interaction and information sharing;
 - organize support for criteria for barrier design of pressure systems;
 - Seek DOE-HSS resolution of ASME Boiler and Pressure Vessel Code dates associated with 10 CFR 851

Planned EPWG events during CY 2009 include:

- January 28, 2009 nationwide teleconference
- Week of April 21, 2009 general meeting in Washington, D.C. hosted by Los Alamos National Laboratory and Argonne National Laboratory
- May 12-14, 2009, EPWG will provide representation at the SSO National Meeting in Las Vegas, Nevada.
- July 29, 2009 nationwide teleconference
- Week of October 21, 2009 general meeting at a location to be determined

EFFECTIVENESS EVALUATION

The EPWG has been effective during the past year, most notably in supporting DOE in several major initiatives for the complex. The EPWG has been positively recognized by the DOE customers in these activities, demonstrating the benefit of the EFCOG and EPWG's close interaction with the DOE. DOE recognition is reflected in the request for group support on new initiatives. This interaction is increasing performance and effectiveness across the complex. The tasks being worked on by the group are issues that are significant and the output of the EPWG is being used by member companies to enhance engineering effectiveness. Strong cross-Working Group interaction was evidenced throughout the year on numerous initiatives. The adjustment of the face to face meetings to include more interactive sessions versus presentations and the focus lead on nonnuclear activities are key examples of this. The year saw continued improvement in all Subgroup interactions and activities. In summary, the EPWG activities and contributions in 2008 covered a broad spectrum of activities and the results were positively recognized by the DOE. Members are enthusiastic with respect to the 2009 planned activities and significant contributions will be expected of EPWG.

LESSONS LEARNED

A positive aspect of the EPWG and its Subgroups this year has been the continuation of increased communication among members, as noted last year. Members of EPWG are now routinely communicating, using the Working Group as a sounding forum, on issues that arise in their locations. In the Fire Protection Subgroup, communication within the DOE fire protection community has substantially increased, resulting in very positive response to the Subgroup and its activities. A challenging aspect of the Working Group and its Subgroups is the great diversity among the various members in how engineering, configuration management, and fire protection activities are organized and executed at their sites. Working Groups need to keep this in mind, to ensure value is maintained

for all its members. The EPWG website and in particular the very complete meeting minutes developed and distributed are a very positive communication tool used to distribute lessons learned and best practices at member facilities.

In addition, communication and teamwork with other Working Groups is improving. Several cross Working Group items of importance to the Department and contractors are currently working. These afford opportunities to coordinate positions and develop strong teams within EFCOG.

As in most volunteer groups, it is difficult at times to get full participation. All members are engaged in significant roles in their companies and additional time to support Working Group activities can represent personal time commitment.

RECOMMENDATIONS

It is recommended that the Engineering Practices Working Group and its four Subgroups continue their activities in support of DOE and the common interest of the contractor community in accordance with the 2009 plans. The EPWG is available to help support other critical initiatives of the EFCOG Directors and DOE that may be identified during the upcoming year. To accomplish all tasks noted, robust member company interaction and involvement on major activities and effective integration among various Working Groups will be required.

ENVIRONMENTAL SAFETY AND HEALTH WORKING GROUP

CHAIR: ANTHONY UMEK, SAVANNAH RIVER NUCLEAR SOLUTIONS

FIRST VICE-CHAIR: MIKE MADISON, ENERGY SOLUTIONS;

SECOND VICE-CHAIR: PAT PADEZANIN, SAVANNAH RIVER NUCLEAR SOLUTIONS

INTRODUCTION

In 2007 the EFCOG Board split the Integrated Safety Management and Quality Assurance (ISM and QA) Working Group to form a new Environmental Safety and Health Working Group (ESHWG). This is the second annual report for this recently formed working group.

The purpose of the ESHWG is to promote excellence in all aspects of environmental protection and safety and health for the member organizations. The scope of this working group includes Industrial Hygiene, Industrial Safety, Environmental Management, Occupational Medicine, Chemical Safety, Electrical Safety, and Radiological Safety. The ESHWG, through its officers, Subgroups, and Task Groups, identifies, evaluates, and selects "best in class" ESH practices, procedures, and tools for deployment and application throughout the DOE Complex. The ESHWG is focused on supporting cost effective, efficient operation of DOE facilities while maintaining - as the highest priority - safe, environmentally sound, and secure operations through the ongoing exchange of information and corresponding improvement initiatives. The ESHWG coordinates with other EFCOG Working Groups and maintains a direct liaison with the ISM and QA Working Group.

The ESHWG has five primary objectives:

- Promote, coordinate, and facilitate the active exchange of successful programs, practices, procedures, tools, lessons learned, and other pertinent information of common interest that can be adapted to enhance ESH performance of all contractors in the DOE complex.
- Working with the EFCOG Board of Directors, identify and address issues of common interest, including initiatives to foster continuous ESH improvement.
- Through focused sub groups, promote cooperation and interchange information, as appropriate, within EFCOG and with other entities involved in similar activities (e.g., Occupational Safety & Health Administration, Institute of Nuclear Power Operations, National Enforcement Investigation/Investigations Center, etc.), while minimizing duplication of efforts.
- Focus on active personal exchanges of management and technical information among contractors.
- Interact with DOE in ways that produce value-added benefits for both DOE and the contractor community. This includes DOE sponsorship and participation in ESHWG activities, as well as participating in technical exchanges with DOE as appropriate.

MEMBERSHIP

Approximately 120 representatives participate on the ESHWG, and its six Subgroups: Chemical Safety and Lifecycle Management, Environmental, Electrical Safety, Industrial Hygiene/Industrial Safety, Occupational Medicine, and Radiation Protection.

ACHIEVEMENTS

The ESHWG held its spring meeting in Washington, D.C., from March 4-6, 2008, in conjunction with the Chemical Safety and Lifecycle Management Conference. This conference was well supported by key external customers and well attended by EFCOG members located in Washinton D.C. and through the use of video conferencing. The fall meeting occurred October 7-9, 2008, in Las Vegas, Nevada with over 200 attendees. In addition, periodic conference calls were held to discuss priority ESH issues and share lessons learned. The ESHWG continued to provide valuable information exchange and development of common solutions to ESH problems of members as is evident by an increase in conference participation from 110 members and guests who attended to first Working Group Meeting in 2007 to over 200 at the 2008 meeting. Other notable achievements in 2008 include:

- Established the Electrical Safety Subgroup which is working on publishing a revised version of the Electrical Safety Handbook
- In conjunction with the DOE Chemical Safety Topical Committee (CSTC), co-sponsored the successful 10th Annual Joint EFCOG/DOE Chemical Management Workshop, March 4-6, 2008 with 230 participants.

Subgroup achievements in 2008 include:

ENVIRONMENTAL SUBGROUP (CHAIR: ROSS FANNING, SAVANNAH RIVER NUCLEAR SOLUTIONS)

The Environmental Subgroup met on June 19-20, 2008, in Big Sky, Montana and again on Oct 7-9, 2008 as part of the semiannual ESHWG meeting. In addition, the Subgroup held monthly conference calls to serve as a vital link between the meetings. Activities and accomplishments by the Subgroup include:

- A survey was conducted to gather information on how sites were implementing or planning to implement necessary changes to execute requirements of Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management". The information obtained from each of these surveys was presented and discussed at the semi-annual meetings as a shared learning activity.
- The sub-group arranged the spring semi-annual meeting to be integrated with the Federal Environmental Symposium - West. This afforded the sub-group attendees the opportunity to also participate in this very informative and applicable annual event.
- The subgroup presented a workshop in conjunction with the Federal Environmental Symposium focused on the implementation of Executive Order 13423 requirements. There were 66 registrants, representing a wide variety of facilities, contractors, and federal agencies.
- Several Subgroup members participated in a special session to provide input to DOE as an aid in drafting DOE Order implementing guides.
- The Subgroup presented a recommendation to the ESHWG to include recognition of the International Standards Organization (ISO) 14001 registration auditing and surveillance process as suitable for formal DOE audits of site Environmental Management Systems (EMS).
- The Subgroup reviewed and approved three Best Practices for publication. Two more Best Practices were presented at the fall meeting and were approved for submittal.
- Several Subgroup members continued to support activities in the DOE's Office of Health, Safety, and Security (HSS) Clean Air Working Group and Environmental Management Systems Assistance Network.

CHEMICAL SAFETY AND LIFECYCLE MANAGEMENT SUBGROUP (CHAIR: JAMES MORGAN, SAVANNAH RIVER NUCLEAR SOLUTIONS)

The Chemical Safety and Lifecycle Management (CSLM) Subgroup mission is to promote excellence and efficiency in all aspects of CSLM by gathering, evaluating, and sharing performance measures, best management practices, and lessons learned. Specific achievements by this group include:

- The CSLM Subgroup, in conjunction with the CSTC, co-sponsored the successful Tenth Annual Joint EFCOG/DOE Chemical Management Workshop, March 4-6, 2008. This year's theme, "Chemical Safety and Life Cycle Management – 10 Years and Still Learning" focused on chemical management services, integration of chemical and emergency response, chemical storage, cylinder life cycle management, and beryllium safety at the Department of Energy sites. The Workshop attracted approximately 240 participants, either in person or by telecast from fourteen sites throughout the DOE complex, and included 30 speakers representing various federal and private sectors.
- Completed the chemical inventory management benchmarking survey of twelve facilities/sites, and compiled results for presentation at the March, 2008 EFCOG/CSTC Chemical Management Workshop in Washington, D.C. Survey results will be used to develop recommendations for applying a graded approach to managing hazardous material inventories and to develop DOE-wide chemical inventory accuracy measurement processes and expectations.
- Submitted a technical paper, "Variations in Reproductive Toxicant Identification", to the Journal of Occupational Hygiene.
- Conducted preliminary discussions and data gathering to compare benefits and drawbacks of commercial off-the-shelf software and custom-developed chemical inventory management software.

INDUSTRIAL HYGIENE AND SAFETY SUBGROUP (CHAIR: ROBERT KEEN, STRATEGIC PETROLEUM RESERVE)

The Industrial Hygiene and Safety Subgroup met at both semi-annual ESHWG meetings and discussed issues of concern to member participants. Presentations were made by Subgroup members as well as non-EFCOG personnel.

American Board of Industrial Hygiene Certification Maintenance (CM) Points were requested and approved for the fall 2007 and spring 2008 meetings. CM Points are also expected for the fall 2009 meeting. CM Points allow safety and health professionals participating in the EFCOG meetings to support their certification as industrial hygienists and safety professionals, reducing the impact on the travel and training budgets to their company and the DOE. Results and products from the meetings included discussions on:

- reasonable accommodations for individual workers under the Americans with Disabilities Act, led by Dr. Mike Ardaiz, DOE's Chief Medical Officer
- nanotechnology within the DOE complex
- medical surveillance for nanotechnology workers
- how to improve the performance of construction subcontractors through effective oversight/communications
- DOE Headquarters' interpretation of DOE Safety and Health Note DOE/EH-0414 to clarify DOE expectation that when breathing air to a supplied air system is lost, a worker does not have to immediately removed the suit. The interpretation, D08-06-001, acknowledges the availability of residual air which allows a supplied air suit user to move to an uncontaminated location

before removing the suit top provided the distance and time are not exceeded and/or excessive.

OCCUPATIONAL MEDICINE SUBGROUP (CHAIR: JAMIE STALKER, LOS ALAMOS NATIONAL LABORATORY)

The Occupational Medicine (OM) Subgroup met in Las Vegas in October at the fall ESHWG meeting. For each meeting, members who attended were earned continuing medical education credit through the Radiation Emergency Assistance Center/Training Site (REAC/TS). The OM Subgroup has completed work on a number of issues this year. At the request of DOE-HHS, the medical directors put together recommendations to the DOE concerning the medical issues within the complex. These are the main recommendations:

- Establish an Office of Chief Medical Officer, to be the champion of leading the initiative for the electronic medical record
- Demonstrate the benefit of quality occupational health services on an organization's productivity and establish a complex-wide initiative to identify the medical issues of the aging workforce
- Establish a medical peer review process with the DOE complex
- DOE should undertake a complex-wide initiative to advocate the use of employee assistance program services with fear the information will be accessed and unfairly used in clearance re-investigations.
- Establish a complex-wide initiative to identify and promote effective ergonomic programs.

The medical directors made a recommendation for the continuing support of REAC/TS at least at its current level of funding by DOE. The medical directors have continued to educate their workforce about the potential pandemic influenza. The medical directors are planning to develop a collaborative working relationship with the Office of Enforcement to facilitate DOE's understanding of the medical issues associated with 10 CFR 851.

ELECTRICAL SAFETY SUBGROUP (CHAIR: LLOYD GORDON, LOS ALAMOS NATIONAL LABORATORY)

Several valuable products were again provided to the complex, designed to protect workers and property from hazards arising from the use of electrical energy. The teaming effort between DOE sponsors and contractor representatives, combined with the support of DOE HQ, contractor corporate management, and EFCOG leadership continues to be a winning combination for the many workers that went home injury free. The Electrical Safety (ES) Subgroup conducted an electrical safety meeting (Golden, Colorado, July 28 - August 1, 2008), and networked regularly to share critical information across the complex.

The ES Subgroup also met on October 29 - November 1, in Las Vegas, Nevada, along with teleconferences every month during the year.

It also updated the DOE Electrical Safety Handbook, and maintained the Center of Excellence for electrical safety.

RADIATION PROTECTION SUBGROUP (CHAIR: JIM STAFFORD, SAVANNAH RIVER NUCLEAR SOLUTIONS)

The Radiation Protection (RP) Subgroup assembled on two occasions during FY 2008, to discuss common issues. One meeting was held in Las Vegas, Nevada, and the second was in Washington, D.C. Both were held in conjunction with other Subgroups under the ESHWG. A significant topic for discussion and benchmarking at each meeting was the recently revised 10CRF835 and lessons

learned in the implementation of the revisions at each of the member sites. Full implementation is not required until 2010; however, numerous strategies are being employed and discussion topics have included neutron factors, employee notifications, DOE Laboratory Accreditation Program accreditation impacts, DOE Headquarters' interpretation, etc. Additional topics discussed have included the various DOE standards being revised as a result of the revision to 10CRF835. The Subgroup has also discussed related regulations.

Presentations were made by RP Subgroup members at both meetings and included updates for standing Subgroup issues as well as new ones. Standing issues include: 1. "Hard to Detect Radionuclides", that focused not only on the specific nuclides but also covered DOE actions related to Requests for Authorized Releases, and 2. "Staffing Shortages," where the membership discussed the difficulties they are having in recruiting and retaining radiation protection professionals as well as radiation protection technician staff members. Lessons learned related to emergency response, events involving uptakes, potential uptakes and contract transitions were also shared.

PLANNING FOR THE NEXT YEAR

ESHWG work plans for 2009 include:

- Conduct two semi-annual working meetings in the spring and fall to coordinate and facilitate Subgroup interaction and involvement; the spring working group meeting will be in Washington D.C. to facilitate participation by DOE Headquarters personnel.
- Sponsor the development of a laser safety task group to identify and resolve critical DOE-wide laser safety issues.
- Sponsor the development of a nanotechnology task group to support ESH issues.
- Support initiatives through subgroups in the following areas:
 - Through the Electrical Safety Subgroup - Continue to revise the DOE Electrical Safety Handbook with the goal of supporting DOE-HQ publication of the revised handbook by the beginning of FY 2009.
 - Through the Industrial Hygiene and Safety Subgroup - Publish a Contractor Guide for a Standardized Process for Low Hazard Exposure Assessment.
 - Through the Chemical Safety and Lifecycle Management Subgroup - In partnership with the DOE Chemical Safety Topical Committee, sponsor the 2009 Chemical Management Workshop in Washington DC in March 2009.
 - Through the Radiation Protection Subgroup - Assist DOE/HQ in 10 CFR 835 revisions and other relevant matters.
 - Through the Environmental Subgroup - Conduct a site survey to capture lessons learned on EMS/ISO certification process and follow-on surveillance audits; establish a list of internal EMS assessment resources for use within the EFCOG community; coordinate an effort in conjunction with the Radiation Protection Subgroup to begin planning and preparation for implementing requirements of revised DOE Order 5400.5 relative to the free release of material.
 - Through the Occupational Medicine Subgroup - Continue support to DOE's HHS and follow up on the medical directors' recommendations
- Support ISM related tasks with the EFCOG ISM and QA Working Group
- Work with DOE and member companies in the implementation of Line Oversight and Contractor Assurance Systems
- Host workshops in support of key DOE and contractor areas of concern.

EFFECTIVE EVALUATION

During this year, the positive impact of the ESHWG to the customer was continued through the various participating contractor operations. Sharing of ESH processes and practices, which were made available for implementation at the various DOE locations resulted in cost savings to all member companies. Activities are focused around two central meetings where all members of the Subgroups can assemble at one place at one time. Use of DOE facilities has minimized meeting costs. Focused workshops will also continue to be held at locations and in facilities convenient to the business and in a cost-effective manner to the customer in accordance with EFCOG operational requirements. Individual subgroup activities and sharing of Operating Experiences and Best Practices which filter back to each member company continues to be seen as a “cost savings.”

LESSONS LEARNED

The best location for working group and subgroup meetings will continue to require management attention. The working group will benefit from maintaining high DOE involvement. To facilitate DOE participation, at least one working group meeting should and will be held in the Washington, D.C. area. Subgroups will be encouraged to meet at the semi-annual Working Group meetings, but some Subgroups will benefit from joint meetings with industry groups. For 2009, the Electrical Safety Subgroup may conduct a meeting in conjunction with the IEEE Electrical Safety Meeting and the Chemical Safety and Lifecycle Management Subgroup will continue to sponsor the annual Chemical Management Workshop.

RECOMMENDATIONS

The ESHWG and its Subgroups as currently organized should continue during 2009.

HUMAN CAPITAL WORKING GROUP

CHAIR: JEFF JAY, SAVANNAH RIVER NUCLEAR SOLUTIONS

VICE-CHAIR: DIONE HEUSEL, STRATEGIC PETROLEUM RESERVE

INTRODUCTION

The EFCOG Human Capital Working Group (HCWG) formed initially as a task group in January 2008 to frame the issues and objectives for an EFCOG-sanctioned Working Group. In March 2008, the EFCOG Board of Directors approved and chartered the new HCWG.

The vision of the HCWG is to support creation of a human capital management system for the management & operating (M&O) contractor environment, which will provide DOE a macro-view of human resource capacity and capability to sustain DOE mission readiness through the next decade.

The purpose of the HCWG is to:

- Promote strategically and systematically effective human capital management approaches to prepare EFCOG for successfully competing in global knowledge economy of 21st century
- Within the government energy sector, advance strategic alliances between program and mission leaders and human resource professionals to preserve and sustain “People Readiness” initiatives crucial to energy workforce capability and capacity vital to U.S. national energy security

HCWG’s objectives are to:

- Measure effectiveness of human capital management performance (people readiness) with demonstrated leading, real-time and lagging performance indicators.
- Assess and evaluate qualitative and quantitative data regarding critical skill sets and institutionalize the approach within the EFCOG community in a manner that is predictive and timely in mitigating risks to the government sector.
- Examine DOE program sectors and present annual results of predictive trends and recommendations of at-risk mission critical skills based on projected demand and supply factors to the EFCOG and DOE community.
- Align strategic human resource and mission management partnerships with industry best practices in human capital.
- Communicate advanced transformational strategies and concepts applicable across EFCOG working groups and DOE programs that support innovative business approaches for sustaining a strong, well-educated and trained 21st century workforce.

MEMBERSHIP

The HCWG membership, with approximately 25 representatives from about 20 member companies, has been established in its first year of operation across a broad spectrum of human capital representation within the M&O community, as well as external non-government organizations to foster strategic dialogue on human capital issues and affects on public policy. Since January 2008, over 60 individuals have participated in some form of HCWG activities. Focus for the first year of the WG membership has been in establishing the infrastructure and leadership to move the WG processes forward. Five Subgroups have been established (although one of the five (Post-Doctorals, or Post-

Docs) is functioning under the auspices of the Critical Skills Subgroup until early 2009) : Strategic Planning, Human Capital Policy, Critical Skills, Post-Docs, and Best Practices.

ACHIEVEMENTS

DOE and the United Kingdom's Nuclear Decommissioning Authority have opened communications regarding an HCWG benchmarking opportunity to address common human capital interests between the two nations that will take on substantive communications in 2009 and beyond. In addition, a special interest topic to DOE and the HCWG is the DOE Health, Safety & Security (HSS)-sponsored research with the University of Maryland regarding the health maintenance and productivity baseline for the current M&O workforce. This task, chaired by Dr. Jodi Jacobson, Assistant Professor, University of Maryland, performs under the auspices of the Human Capital Policy Subgroup and currently has garnered some voluntary support from medical directors within the M&O community.

Other specific accomplishments during 2008 include:

- The HCWG Chair met with key DOE Sponsors.
- The first formal HCWG meeting was held at the Strategic Petroleum Reserve site in June to discuss leadership and topics for the Working Group.
- Conducted HSS-sponsored collaboration with University of Maryland regarding Baseline Health & Productivity of Current EFCOG Workforce.
- Established liaison with the National Academy of Public Administration and Partnership for Public Service.
- Held the second HCWG meeting at Sandia National Laboratory, Albuquerque, NM in November, focused on Critical Skills Benchmark and HC Contractor Policy; discussed Educational Processes and Critical Skills Interfaces with Technology-based Businesses - Advanced Technology Academy, Critical Skills Institutes, Advanced Manufacturing Trades Training Program, Post-Doc Professional Development Program; identified option to address DOE M&O labor demands over next 5 to 10 years through use of periodic, independent Department of Labor survey grant proposal; and identified a refined approach to better understand DOE O 350.1, "Contractor Human Resource Management Programs" policy issues with a comprehensive complex-wide survey.
- Conducted a critical meeting with Sandia National Laboratory and Lawrence Livermore National Laboratory Post-Docs to frame initial issues regarding effective recruitment and retention of M&O Post-Docs and prepare baseline benchmark for complex-wide review and application. Established initial framework of Subgroup with priority on:
 - Determining Consistent Pathway for Post-Docs to Full Employment
 - Centralizing Oversight of Post-Doc Program Implementation
 - Defining Post-Doc Position Performance Review Criteria
 - Improving Mentor/Principal Investigator Interpersonal Skills
 - Improving Attraction Attributes and Professional Development for Post-Docs in National Laboratory Settings

The HCWG also established communications to negotiate use of LLNL-developed decision-based analytical software tool across the complex to identify and analyze over 200 critical skills using different business scenarios to project human capital needs over a 5-year period.

At the Subgroup level, substantial progress was made on the following actions in 2008:

STRATEGIC PLANNING SUBGROUP (CHAIR: DIONE HEUSEL, STRATEGIC PETROLEUM RESERVE) - GOAL: WORK ON CULTURE, IMAGE AND TECHNOLOGY THAT ESTABLISHES DOE/M&O COMPLEX AS ATTRACTIVE AND RESPECTED PLACE TO PURSUE CAREER

Task	Actions
SP-1	Determine potential to benchmark with Futurists (Dean Camen)
SP-2	Develop draft branding campaign with regards to M&O HC Sustainability and attractiveness of mentorship by current workforce with future scientists, engineers and technicians from Gen X/Y/Millennials
SP-3	Establish a comprehensive and modern branding message, given generational differences & motivations, and prepare strategy for developing FY 2010 DOE Program/M&O funding
SP-4	Develop proposal to EFCOG Board of Directors to modernize EFCOG website with interactive software capabilities that are user friendly and reflect updated knowledge management applications for future EFCOG members
SP-5	Prepare recommendation on M&O strategy for development and implementation of institutional knowledge management system for transfer of knowledge between workforce generations

HUMAN CAPITAL POLICY SUBGROUP(CHAIR: KATHRYN CRAFT ROGERS, LAWRENCE LIVERMORE NATIONAL LABORATORY) – GOAL 1: BREAK GROUND ON BARRIERS IN DOE O 350.1 HC POLICIES THAT HINDER EFFECTIVE UTILIZATION OF M&O RESOURCES, TO INCLUDE INFRASTRUCTURE AND RELATED PROGRAMS TO DEVELOP, TRAIN AND TRANSFER KNOWLEDGE TO NEXT GENERATION WORKERS.

Task	Actions
PO-1	Acquire Contracts/Procurement Expertise from Acquisition WG to support HCWG Policy Subgroup
PO-2	Develop HC Policy project plan/timeline
PO-3	Establish regular HC Policy conference calls
PO-4	Draft letter from EFCOG Chair to EFCOG leadership requesting functional Subject Matter Expert (SME) input re: barriers and/or recommended improvements to DOE O 350.1 (or other applicable policies)
PO-5	Gain stakeholder buy-in prior to issuing letter & survey
PO-6	Develop survey to accompany letter for SME input
PO-7	EFCOG Chair approve HC Policy Letter and release of survey tool to EFCOG member representatives
PO-8	Send letter and survey to HCWG participants; post letter on EFCOG HCWG web-site
PO-9	Receive responses to survey
PO-10	Compile & forward survey results to HC Policy Subgroup members

Task	Actions
PO-11	Expand HC Policy Subgroup to add needed SMEs based on survey results
PO-12	Draft recommendations for policy change based on survey results
PO-013	Formalize interface and support from Federal staff to augment review and revisions of policy
PO-14	Brief EFCOG Board of Directors regarding HC Policy Subgroup path forward

HUMAN CAPITAL POLICY SUBGROUP – GOAL 2: SUPPORT DOE HSS, OAK RIDGE INSTITUTE FOR SCIENCE & EDUCATION (ORISE) AND THE UNIVERSITY OF MARYLAND IN CONDUCTING M&O SURVEY TO BASELINE HEALTH & PRODUCTIVITY OF CURRENT WORKFORCE.

Task	Actions
PS-1	Send letter of introduction of Dr. Jacobson and Overview of Health Survey Project to EFCOG member representatives
PS-2	Brief EFCOG WGs regarding Board on Health & Productivity Management Concept & Path Forward
PS-3	Recruit Volunteer M&O Organizations willing to participate in survey (Argonne National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratory)
PS-4	Prepare Point Paper to Garner EFCOG Board of Directors and DOE Programs Support for FY 2010 Funding Requirements
PS-5	Report results from volunteer M&O organizations
PS-6	Prepare and present formal report on initial volunteer results to promote EFCOG & DOE program support for FY 2010 funding

CRITICAL SKILLS SUBGROUP (CHAIR: TOM RICHEY, OAK RIDGE Y-12) – GOAL 1: ESTABLISH A NETWORK ACROSS THE DOE COMPLEX TO INVENTORY CRITICAL SKILLS OF EACH NATIONAL LABORATORY AND SITE.

- Develop short-term mechanism to identify and inventory critical skills across the DOE complex
- Assess and evaluate aggregate data on critical skills with independent verification
- Recommend approaches to DOE in the establishment of a workforce development plan

Task	Actions
CI-1	Negotiate application of Lawrence Livermore National Laboratory-developed decision-based analytical software tool for use across complex to identify, inventory and analyze 200+ critical skills for project shortfalls
CI-2	Define common set of Critical Skills terms to standardize communications across the DOE complex
CI-3	Prepare proposal for DOE Workforce Study performed by a qualified public/private sector labor economics group for independent verification of labor demand

Task	Actions
CI-4	Create technical incentives for other EFCOG expertise to participate in HCWG activities with initial focus on Engineering Practices Working Group
CI-5	Obtain list of Labs/Sites contracts projected for re-bids within next 5 years
CI-6	Invite Labor Economist to next WG meeting
CI-7	Present Workforce Study to EFCOG Board of Directors for FY 2010 funding action
CI-8	Develop presentation for EFCOG Board of Directors, NNSA and DOE addressing Critical Skills Inventory results and recommended approaches for workforce development plan
CI-9	Report results to EFCOG Board of Directors, NNSA and DOE for DOE Line and Program Support for FY 2010 Funding

CRITICAL SKILLS SUBGROUP – GOAL 2: BETTER UTILIZE POST-DOCTORAL EMPLOYEE PIPELINE DOE-WIDE TO FILL CRITICAL SKILLS NEEDS; CONVERT PROVEN POST-DOC COMMODITIES TO PRODUCTIVE CONTRIBUTORS AND UNDERSTAND ATTRACTION AND RETENTION BEST PRACTICES FOR THIS GENERATION OF WORKERS.

- Established initial framework with national priority on:
 - Determining Consistent Pathway for Post-Docs to Full Employment
 - Centralizing Oversight of Post-Doc Program Implementation
 - Defining Post-Doc Position Performance Review Criteria
 - Improving Mentor/Principal Investigator Interpersonal Skills
 - Improving Attraction Attributes and Professional Development for Post-Docs in National Laboratory Settings
- Establish Post-Doc Subgroup to address improved processes and serve as pipeline for future EFCOG technical and professional leadership development.

Task	Actions
CP-1	Convene informal focus group of Post-Docs to frame and prioritize issues
CP-2	Publish draft of initial results as basis to expand substance to issues as Subgroup grows in membership
CP-3	Establish interim Post-Doc leadership to stand-up subgroup across M&O complex
CP-3	Expand Post-Doc membership for Subgroup with other professional Post-Doc associations
CP-4	Convene formal subgroup meeting as part of HCWG venue, develop strategy and action plan for moving improvements agenda and select formal subgroup chair
CP-5	Brief EFCOG Board of Directors on Subgroup initiative and path forward for FY 2010; introduce new Chair

BEST PRACTICES SUBGROUP (CHAIR: KEN ANDRIESON, NEVADA TEST SITE) – GOAL: DEVELOP BEST PRACTICES TO REINFORCE SUSTAINABILITY OF HUMAN CAPITAL – EDUCATION & TRAINING MODEL FOR OPTIMIZING EFFORTS

Task	Actions
BP-1/SP-4	Modernize EFCOG website to accommodate interactive Best Practices fed into <i>Sustainability of Human Capital Model</i>
BP-2	Focus initial efforts on outreach and other community initiatives designed to attract, recruit and retain individuals
BP-3	Publish at least one Best Practice under each set of initiatives
BP-4	Codify process for maintenance and sustainability of initiative

PLANNING FOR THE NEXT YEAR

For 2009, the HCWG will focus on two major fronts:

- Increase active growth in volunteer and leadership base by 50 people and increase company representation from 30% to at least 50% of EFCOG companies actively involved in technical support to human capital initiatives across the M&O community. Currently, only 30% of the M&O companies are engaged in the work of the group on such an important issue, which could transcend all EFCOG activities with impacts coming sooner rather than later. Several of the DOE offices are working related human capital issues in their respective programs. The EFCOG HCWG provides lateral integration support capabilities among all DOE program offices to ensure the M&O community can efficiently and effectively address these issues.
- Advance all of the strategic action items within the subgroups of Strategic Planning, Human Capital Policy, Critical Skills, Post-Docs and Best Practices and bring at least 75% of current action items to successful closure in 2009.
 - Establish and deploy effective branding message for future generation DOE M&O workers.
 - Collaborate with and provide recommendations to the DOE Office of Human Resources regarding future policy changes involving pension, benefits, compensation and risk management in a manner that facilitates workforce excellence and improved mission performance prior to the formal DOE Order revision process.
 - Collaborate with DOE HSS, Oak Ridge Institute for Science & Education and the University of Maryland in conducting the M&O survey to baseline health & productivity of current workforce and assist in completing report and submission to DOE HSS.
 - Develop and deploy capability to collect accurate critical skills data across the M&O community that protects individual M&O proprietary information while providing a macro-picture of an inventory of human capital capabilities and critical skills shortfalls vital to sustaining the DOE mission.
 - Prepare recommendation for DOE to sanction and work with the Department of Labor and M&O contractors in preparing a workforce study on the M&O demand over the next 5 – 10 years for critical skill sets important in sustaining the DOE mission.
 - Establish leadership and subgroup forum for Post-Docs to address related human capital issues specific to post-doc employment and technical activities within the national

laboratory system to ensure post-docs are leveraged in the market place effectively in meeting a cross-section of national needs.

- Develop and publish Best Practices reflective of initiatives noted in the model for Sustainability of Human Capital – Education & Training Model for Optimizing Efforts

Planned HCWG events in CY 2009 include:

- March 4 and 5, 2009: HCWG Meeting, Waste Management 2009 Conference, Phoenix .Arizona
- May 2009: HCWG Meeting, Oak Ridge, Tennessee
- October 2009: HCWG Meeting, Nevada Test Site, Las Vegas, Nevada

EFFECTIVENESS EVALUATION

By start-up measures, the HCWG has been a tremendous success as noted by the initiatives outlined in this report. More importantly, the DOE senior sponsors have been involved along the way, particularly in addressing critical skills issues. Furthermore, the head of DOE's HSS agreed to actively participate and help drive the important work done by the HCWG. Significant to this DOE senior sponsor relationship is his direct report relationship to the Secretary and Deputy Secretary of Energy. This Working Group has all the "right stuff" to be effective in meeting its chartered obligations; however, additional technical resources dedicated to collaboration and transparency must step up to the challenge and look at the overall human performance of the M&O community through the eyes of the corporate-level executive responsible for the broader DOE mission.

The working group by its charter and challenges has a 10-year mission to institutionalize the types of human capital initiatives strategically important to sustain the DOE mission over the long haul. Given its first year anniversary, the team has been effective but is just getting started.

LESSONS LEARNED

The HCWG's initial success is attributed to a dedicated group of professionals, representing diverse disciplines and institutions that willingly have left their competitive institutional interests at the door in order to collaborate on human capital issues of strategic, common concern with severe implications in the sustainability of the Department of Energy mission and M&O contractor performance, if left unchecked. Likewise, strong senior DOE sponsorship has been vital with its sound advice and counsel to the group. The group quickly organized with leadership, organizational structure and a set of substantive issues to address, stretching the paradigm of the group in the daunting tasks ahead. Moving institutional M&O cultures so used to competition, where information is protected and shared sparingly, now into a new world of collaboration and transparency is the major challenge ahead for the team.

There are ~140,000 M&O contractor employees under the oversight of ~14,000 DOE Federal civil servants. The HCWG is not aware of any strategic human capital performance metric at the Secretary's level that depicts critical skill projected losses and gains relative to schedule and degree of impact to DOE missions. The necessary human capital information from among the EFCOG member companies is not currently shared and analyzed as an aggregate for supporting strategic policy and Congressional funding. The DOE HSS Sponsor has challenged the HCWG to facilitate the collaboration of this effort.

Currently, the HCWG sustains its work with about 20 active participants with a similar number of EFCOG companies represented, although the initiative has had about 60 people involved along the way. This level of reinforcement from the EFCOG community is not enough in order for the group to be

effective in meeting its chartered commitment. While the group values the contributions from the human resource professionals involved, the HCWG needs an equal, if not increasing, number of other technical and managerial disciplines involved to make the kind of strategic difference necessary for the human capital pipeline necessary to sustain the future of the DOE mission.

RECOMMENDATIONS

Given the excellent start of this group, the HCWG should be continued in 2009. The HCWG also recommends that the EFCOG Board of Directors actively recruit for the HCWG technical and managerial resources dedicated to: collaboration and transparency in a team setting; who have talent to look at corporate perspectives; and who understand the design of tactical processes that can result in strategic mission performance and measurement.

INFRASTRUCTURE MANAGEMENT WORKING GROUP

CHAIR: DENISE ROBINSON, LAWRENCE LIVERMORE NATIONAL LABORATORY

VICE-CHAIR: JOHN CLYMO, NEVADA TEST SITE

INTRODUCTION

The vision of the Infrastructure Management Working Group (IMWG) is to share its expertise in infrastructure management and provide strategic advice that will enable DOE and its contractors to have a responsive infrastructure that is essential to support the DOE's missions. In addition, IMWG will focus on key DOE issues with the goal of meeting mission needs cost effectively.

The purpose of IMWG is to promote excellence across the DOE complex, and as a team, foster growth and opportunities to continue to incorporate the best practices at all DOE sites using shared information and resources to accomplish this vision.

IMWG's approach is to partner with DOE and its contractors, to communicate effectively across the complex and to develop core guidelines and shared leadership styles to support facility management as the foundation of a responsive infrastructure in support of DOE missions.

The scope of IMWG includes improving asset management and maintenance; work management productivity; recommending and/or developing effective infrastructure metrics; improving construction management; and disseminating best practices and lessons learned.

MEMBERSHIP

IMWG currently has 80 members representing 21 member companies. By the end of 2008, the IMWG was comprised of four Subgroups focused on specific facility and infrastructure areas: Asset Management and Performance Measures, Construction Management, Maintenance Management, and Work Management.

ACHIEVEMENTS

During 2008, IMWG continued to focus on key initiatives established with DOE and NNSA sponsors to include maintenance and operations, deferred maintenance, performance metrics, and work management. The major accomplishments include development of white papers on sustainment models and partnership with DOE to support DOE Order 433.1, "Maintenance Management Program for DOE Nuclear Facilities".

Scheduled activities for the year included Steering Committee conference calls, which improved communication between DOE sponsors and Subgroup chairs and progress on the initiatives. The annual IMWG Steering Committee meeting was held in July in the DOE Las Vegas, Nevada office.

Specific Subgroup accomplishments during the year are summarized below.

ASSET ACQUISITION SUBGROUP (CHAIR: JIM MEDFORD, AREVA)

The Asset Acquisition Subgroup was focused primarily on alternative finance. Although there was activity in this area, the group did not identify an ongoing need for this Subgroup and membership was limited and variable. The decision was made to combine this Subgroup with the Asset Management

and Performance Measures Subgroup, while maintaining existing resources and contacts as practical in the event that a future role in alternative finance becomes apparent.

ASSET MANAGEMENT AND PERFORMANCE MEASURES SUBGROUP (CHAIRS: RABINDER MALHOTRA, ARGONNE NATIONAL LABORATORY, AND PAUL REYNOLDS, LAWRENCE LIVERMORE NATIONAL LABORATORY)

The Subgroup worked on the initiatives summarized below:

- Surveyed replacement values (RPV) calculation methods: The RPV initiative goal is to achieve possible future savings and standardizes method for calculating RPV. Phase I was a survey of EFCOG sites that compared methods used to calculate RPV. Phase II and III are planned for the year ahead.
- Metrics and Methodologies for Calculating Asset Utilization: The purpose of this initiative was twofold. First was to determine the consistency in the application of the asset utilization index calculation across the DOE community. The information gathered through this survey assists in identifying areas that need further clarification to achieve standardization. Second, this survey obtains matrices and other best practices that the various organizations have found beneficial in improving the asset utilization at their sites. Phase I was to create an asset utilization survey, which was completed and reviewed in 2008. Phase II and III are planned for the year ahead.

CONSTRUCTION MANAGEMENT SUBGROUP (CHAIR: VACANT)

- No action was taken on this group pending identification of a chair.
- Discussions are underway to move this Subgroup to the Project Management Working Group.

MAINTENANCE MANAGEMENT SUBGROUP (CHAIR: ED WILLIAMS, SANDIA NATIONAL LABORATORY)

- Continued supporting the DOE Order 433.1 Working Group
- Continued support of Office of Engineering and Construction Management and NNSA on sustainability (greening of real property) as required by Executive Order 13423 and establishment of a consistent approach to sustainment
- Deployed the results of the sustainment model white paper
- Developed definitions for skill of the craft
- Worked with DOE Office of Science on their stewardship initiative
- Conducted a survey of the maintenance management systems that different sites are using
- Worked with DOE to develop a refined model to address 2-4% maintenance related to enduring and non-enduring facilities

WORK MANAGEMENT SUBGROUP (CHAIR: STEVE LITTLE, OAK RIDGE Y-12)

- Performed an assist visit at Lawrence Livermore National Laboratory in the late spring
- Developed white paper on incorporating Human Performance Improvement (HPI) into work control corrective actions
- Surveyed sites to develop benchmarks on ratios of support personnel to crafts

PLANNING FOR THE NEXT YEAR

Work plans for the IMWG at the Subgroup level in 2009 include:

The Asset Management and Performance Measures Subgroup has two planned initiatives:

- Develop a white paper on asset utilization goals and metrics. Phase II will send the survey out to EFCOG sites for completion during the first part of 2009. Phase III will evaluate and analyze

- the information; this should be completed by September 2009. The findings, as appropriate, will be part of a white paper to be shared among the EFCOG community
- Partner with the Maintenance Subgroup to develop a white paper on calculating RPV and guidance related to RPV of enduring vs. non-enduring facilities. Phase III will rollout the results and will be completed in December 2008

No action is planned for the Construction Management Subgroup, pending identification of a chair or possible movement to the Project Management Working Group

The Maintenance Management Subgroup has two planned initiatives:

- Develop an initiative to review and conduct a comparison evaluation of the primary sustainment models in use across DOE
- Rewrite of the DOE Order 433.1 initiative to reflect current circumstances and path forward

The Work Management Subgroup will build on the successful peer (or assist) visits, which provide extremely good exchange of information between sites, with an initiative to communicate the most common deficiencies found during the visits into an improvement initiative.

EFFECTIVENESS EVALUATION

The IMWG continues to have excellent support and involvement from its DOE and NNSA sponsors. Those partnerships are evidenced in the numerous DOE and NNSA requests for input from the Working Group.

LESSONS LEARNED

Coordination among working groups is critical to avoid potential overlapping topics. Contractor changes are increasing turnover in the leadership of subgroups, which in turn slows progress on initiatives. Vice Chairs for each of the subgroups should be established to facilitate continuity during personnel changes.

RECOMMENDATIONS

The IMWG should be continued in 2009, and continue to partner with the NNSA, OECM, and Office of Science on key initiatives. Because Subgroup sponsors are interested in both topics and the interface between them, it is recommended that the Board of Directors consider combining the Infrastructure Management and Energy Efficiency Working Groups. The DOE and NNSA sponsors and the sites would perhaps be better served by combining the Working Groups into one Infrastructure and Energy Working Group. It is also recommended that the Construction Management Subgroup be moved to within the Project Management Working Group.

INTEGRATED SAFETY MANAGEMENT AND QUALITY ASSURANCE WORKING GROUP

CHAIR: NORM BARKER, ENERGY SOLUTIONS

FIRST VICE-CHAIR: JOHN McDONALD, WASHINGTON RIVER PROTECTION SOLUTIONS;

SECOND VICE-CHAIR: SUSAN KIMMERLY, OAK RIDGE BECHTEL-JACOBS

INTRODUCTION

The vision of the Integrated Safety Management (ISM) and Quality Assurance (QA) Working Group is to be recognized by DOE, NNSA, and EFCOG as a driving force for complex-wide performance improvement throughout the full spectrum of Integrated Safety Management and Quality Assurance activities.

The purpose of the ISM and QA Working Group remains to promote excellence in the development, implementation and validation of ISM and QA programs and processes by sharing information and lessons learned, and by facilitating the application of ISM information, techniques, and best practices at DOE sites.

The primary objectives of the Working Group are to:

- Promote, coordinate and facilitate the active exchange of successful programs, practices, procedures, lessons learned and other pertinent information of common interest to ISM and QA.
- Promote ISM and QA awareness and understanding by sharing management and technical information.
- Facilitate integration of existing ISM and quality-related processes and work practices.
- Identify streamlined techniques and best practices that enable cost-effective and accelerated implementation of validated ISM and QA processes and programs.
- Facilitate coordinated contractor input to DOE on ISM and QA-related issues.
- Provide an efficient mechanism for interfacing between DOE and senior contractor executives and subject matter experts responsible for development, implementation and continuous improvement of ISM.

MEMBERSHIP

Membership on the Working Group and Subgroups is approximately 150 representatives, including members from the majority of the sites and approximately 40 EFCOG member companies.

The Working Group has three Subgroups: Quality Assurance, Feedback and Improvement, and ISM Program Management, along with their associated task groups.

To ensure the Working Group continued to include a focus on industry best practices and lessons learned, liaison membership has been established with the Institute of Nuclear Power Operations (INPO), the Defense Nuclear Safety Board (DNFSB), and the National Laboratories Improvement Council (NLIC). The Working Group has also established effective communications with the other key EFCOG Working Groups.

ACHIEVEMENTS

Working Group achievements in 2008 included:

- Semi-annual Working Group meetings were held at the Oak Ridge National Laboratory Conference Center in Oak Ridge, TN from March 25-27, 2008 and at the DOE NNSA Nevada Site Office facilities in Las Vegas, NV from November 18-20, 2008. Key external customer and subject matter expert participation ensured the meetings were addressing current DOE and industry issues. Attendance at the semi-annual meetings averaged approximately 150 people.
- Periodic conference calls were held to discuss priority ISM issues and share lessons learned.
- Maintenance of an EFCOG-wide “Best Practices” website which provides a single reference point for all Contractors and the DOE.
- Continuing liaisons with INPO, the DNFSB, and NLIC.
- Initiated a Safety Culture Task Team to evaluate ISM coverage of Safety Culture criteria.
- Initiated a separate QA Task Force to assist DOE Office of Environmental Management (EM) on a Quality Assurance Improvement Project.
- Provided a lead auditor qualified to NQA-1 for each EM “Assist Visit & Audit.
- Provided NQA-1 Training to EFCOG & DOE.
- Supported the development of EM QA Plan.
- Supported DOE’s Health, Safety, and Security on review of DOE Orders 414.1, 226.1, and 450.4-1.
- Developed a plan for NNSA on Quality Assurance improvement.

Subgroup accomplishments in 2008 were as follows:

FEEDBACK AND IMPROVEMENT SUBGROUP (CHAIR: PATRICIA ALLEN, WASHINGTON SAVANNAH RIVER COMPANY)

- Initiated the Occurrence Reporting and Processing System (ORPS) Task Group, developed a generic training module, and conducted ORPS training..
- Worked with the QA Subgroup to jointly develop guidance on a integrated QA and ISM assessments. A white paper was drafted and routed for review and presentation.
- Worked closely with the Contractor Assurance Working Group to evaluate areas of potential overlap with the Feedback and Improvement Subgroup. Decided to work closely together on developing and utilizing “Leading Indicators” to better manage the overall performance of a project.
- Conducted two annual meetings and continued to share good practices among the participating organizations and with DOE Headquarters.
- Supported, as requested, the DOE Headquarters Occurrence Reporting Program Manager through the ORPS Task Group activities.
- Shared lessons learned on effective transition activities and ISM verification actions.
- Supported the ISM Program Safety Culture initiatives.
- The ORPS Task Group also reviewed study results of DOE Recurring-type ORPS reports from 2003-2007 to address several areas including: are there any positive or negative trends, what causal analysis methods are used within the complex, what is the frequency of Human Performance cause coding & couplets, are any novel corrective actions being implemented across the complex, and to determining if “R” reports minimize the risk of recurrence within the project as well as across the complex.

ISM PROGRAM MANAGEMENT SUBGROUP (CHAIR: ROY SCHEPENS, PARSONS)

The Subgroup focused on two high visible, high impact tasks over the past year:

- the DOE/EFCOG Safety Culture Task
- the HPI Implementation Tools Project

On November 1, 2006, the DOE issued DOE M 450.4-1, "Integrated Safety Management System (ISMS) Manual". Among the changes was a new section on supplemental safety culture elements which included human performance indicator (HPI) attributes. These elements are based on experience and learning over the past ten years since ISM was first introduced. In 2008, HPI and Safety Culture were identified as top 5 ISMS priorities by the DOE.

The EFCOG ISM Program Management Subgroup is responsible for safety culture. In a joint effort to take ISMS to the next level of performance, a joint EFCOG-DOE sponsored project was initiated to identify a consensus set of safety culture principles to be used by DOE and its contractors, as well as tools to assess and improve safety culture. A diverse Safety Culture Task Team of senior industry leaders representing major contractors, DOE, DNFSB, and INPO was established. Five Task Team meetings were held in 2008. The Task Team is on schedule and prepared to begin introduction and implementation of this initiative by the end of CY 2008. The EFCOG website contains the status of ongoing deliberations and related information for this task.

The Safety Culture Task Team identified three ISMS Safety Culture Focus Areas and associated attributes. The following process is suggested by the Task Team for each organization to assess their safety culture:

- Review the Safety Culture focus areas and attributes.
- Review the ISM Guiding Principles and Supplemental Safety Culture Elements identified in the ISM Manual for additional clarification (DOE M 450.4-1).
- Assess these Safety Culture focus areas and attributes. An assessment of safety culture would likely involve a combination of methods such as direct observations, review/assessment of key safety culture related processes, performance indicator monitoring and trending, surveys and/or interviews, and facilitated safety culture workshops.

ISMS Safety Culture focus areas and associated attributes:

- Leadership
 - Clear expectations and accountability
 - Management engagement and time in field
 - Conservative decision making
 - Open communication/raising issues in an environment free from retribution
 - Demonstrated safety leadership
 - Staff recruitment, selection, retention, & development
- Employee/Worker Engagement
 - Personal commitment to everyone's safety
 - Teamwork and mutual respect
 - Participation in work planning and improvement
 - Mindful of hazards and controls
- Organizational Learning
 - Performance monitoring through multiple means
 - Use of operational experience

- Trust
- Questioning attitude
- Reporting errors and problems
- Effective resolution of reported problems

The ISM Program Management Subgroup is also responsible for HPI. The HPI Implementation Tools Project was developed as a mutually beneficial initiative between DOE and EFCOG to assist DOE contractors in making available a suite of tools recommended for the implementation of HPI and improvement of ISMS. Project implementation is overseen by the Subgroup. It reflects a significant commitment by DOE contractors through the EFCOG to take an active role in providing these tools. Guidance documents represent the best available information to implement HPI based on experienced contractor and DOE inputs. The project aligns with stated EFCOG functions to exchange successful programs, practices, procedures, and lessons learned among DOE contractors; and allow for effective interface with external organizations such as INPO and the DNFSB. The project will also benefit limited DOE HPI resources by providing one source of guidance documents to implement HPI supported by EFCOG members with DOE input and oversight. In 2008 the HPI project's focus was to complete six deliverables for the HPI Project Plan.

The project is on schedule. Completed activities which have been posted on the EFCOG website include:

- HPI Steering Committee Approach
- HPI Training Development and Implementation
- HPI Self Assessment (Gap Analysis)
- HPI and Causal Analysis
- HPI and Work Planning
- HPI and Safety Culture

No direct cost savings or cost avoidance were identified. Communication of good practices by contractors experienced in selected areas has provided benefits to other contractors in the form of exchange of information. DOE communications has provided current status and future plans on important initiatives which provide value to members as well. The DOE, DNFSB, and INPO have consistently provided good support to this effort since its inception.

QUALITY ASSURANCE SUBGROUP (CHAIR: MIKE MASON, BECHTEL)

The QA Subgroup is comprised of three task groups. These task groups are the QA Policy and Requirements Task Group; the Supply Chain Quality Task Group; and the Quality Engineering Task Group. Collectively, the QA Subgroup was able to initiate, develop, and complete a variety of activities itemized below. The Subgroup met two times during the course of the year, in conjunction with the full Working Group meetings, and conducted monthly teleconferences to discuss issues and status the commitments made to DOE and NNSA. Some of the items listed below will continue to be worked on during 2009; in addition to these items, the Subgroup will consider chartering two new Task Teams to address implementation of issues associated with management of software and quality control/inspection.

The QA Policy and Requirements Task Group has performed the following tasks throughout 2008:

- Supported DOE's HSS with the re-write of the QA Guidance document supporting 413.3
- Supported HSS on the review of Order 414.1
- Completed a white paper discussing implementation issues associated with NQA-1, Part II

- Developed a “strawman” used to support the EM task team formed to address the implementation of graded approach practices
- Supported DOE Headquarters in the developed of a complex-wide lessons learned program
- Gathered requirement matrices comparing various editions of national consensus standards

The Supply Chain Quality Task Group has supported the following tasks throughout 2008:

- Identified the lead auditor and audit team members to participate in conducting a joint audit of Air Techniques International (ATI) per DOE Headquarters’ request. ATI is the DOE subcontractor who manages the Filter Test Facility in Maryland. The joint audit is scheduled to be completed by January 2009.
- Completed the development of an EFCOG procedure for conducting joint audits of common suppliers is currently under development.
- Updated the commodities listing of safety-class, safety-significant commodities that are commonly purchased by contractors and potential suppliers of the commodities.
- A standard checklist for each of the commodities that can be used for evaluating the suppliers is under development; this will ensure evaluation criteria is adequate for most Contractors to be able to use the audit results.
- Continuing to pilot the use of the Integrated Supplier Information System (ISIS) for sharing supplier evaluation information on a limited basis for common suppliers. To date, 20 contractors have been given access to the ISIS supplier evaluation information.
- Presented the status of the Integrated Contractor’s Purchasing Team Basic Ordering Agreements (BOA) for waste containers and the Packaging Management Council’s (PMC) role in evaluating suppliers that have submitted proposals for the BOA was presented. The PMC’s supplier evaluation information of container and waste boxes supplier is being shared among the Supply Chain Quality Task Group members and entered into ISIS.

The Quality Engineering Task Group has performed the following tasks throughout 2008:

- Developed and submitted the "Suspect/Counterfeit Item Guidance Document"
- Developed a paper discussing guidance for Hold/Witness Point Usage; and initiated
- Developed a description document on “QA Engineer Roles and Responsibilities”
- Reviewed the Commercial Grade Dedication Process for best practice
- Developed a Construction Quality Assurance best practices for nuclear work
- Drafted an application guide to address the management of non-safety software.

PLANNING FOR THE NEXT YEAR

Activities for the ISM and QA Working Group include:

- Conduct two semi-annual Working Group meetings in the spring and fall to coordinate and facilitate Subgroup interaction and involvement.
- Continue to support and advance initiatives in the following areas:
 - EFCOG Best Practices
 - ISM, Human Performance, Occurrence Reporting and QA-related training and communication
 - ISM Program / Safety Culture Initiatives
 - EM QA Improvement Project
 - Support to EM on NQA-1 Audits
 - Support NNSA Defense Programs on QA Improvement Project

- Enhancing Best Practices Process effectiveness
- Support to the DOE 2009 Integrated Management Summit, especially in the area of Quality Assurance
- Support ISM and QA related tasks and the EFCOG Critical Few in areas such as:
 - Working with DOE and member companies in the implementation of Line Oversight and Contractor Assurance Systems
 - Development of a recommended set of criteria to assess supplier evaluation and qualification processes
 - Supporting EFCOG productivity initiatives
 - Supporting the final development and implementation of the DOE ISM Manual
 - Supporting the DOE Human Performance Initiatives and,
 - Hosting Workshops in support of key DOE and Contractor areas of concern.
- Conduct additional training sessions on ORPS
- The Feedback and Improvement Subgroup and the QA Subgroup will continue working jointly on guidance to better integrate QA and ISM assessments. The team will focus on one or two sessions to expand the concept for the consolidation.
- Prepare draft guidance on how to develop leading indicators and what actions (or, examples of actions) can be taken to make mid-course corrections.
- Support, as requested, the DOE HQ Occurrence Reporting Program Manager through the ORPS Task Group activities.
- Continue support of DOE in the implementation of DOE Order 210.2.
- Support the ISM Program Safety Culture Initiatives
- Complete the HPI Implementation Tools Project
- Complete the Safety Culture Task Team trial by December 2009
- Consider chartering two new Task Teams to address implementation of issues associated with management of software and quality control/inspection

EFFECTIVE EVALUATION

The role of the ISM and QA Working Group is projected to continue expanding in both scope and membership during 2009 and beyond. The Working Group serves as the institutional group that promotes and sponsors ISM and QA across the DOE complex and among EFCOG member companies.

During this year, the positive impact of the Working Group to the customer was continued through the various participating contractor operations. Sharing of ISM and QA processes and practices, which were made available for implementation at the various DOE locations resulted in cost savings to all Member Companies. Activities are focused around two central meetings where all members of the Subgroups can assemble at one place at one time. Focused workshops will also continue to be held at locations and in facilities convenient to the business and in a cost-effective manner to the customer in accordance with EFCOG operational requirements. Individual Subgroup activities and sharing of operating experiences and best practices which filter back to each member company continues to be seen as a “cost savings.”

LESSONS LEARNED

Continued coordination of Subgroup meetings at the same location and concurrent with the Working Group meetings is better for member company representatives who participate on more than one task team or Subgroup. In the future, more attention will be placed on scheduling workgroup and Subgroup meetings that better accommodate fewer member company representatives needing to attend meetings at multiple locations if possible. The only on-going limitation is related to available

meeting space at central DOE facilities. Use of DOE facilities has minimized meeting costs. Additional locations are currently being evaluated by the Working Group's leadership.

RECOMMENDATIONS

The ISM and QA Working Group, Subgroups and Task Groups as currently organized should continue during 2009.

PROJECT MANAGEMENT WORKING GROUP

CHAIR: CLAY JONES, WASHINGTON SAFETY MANAGEMENT SOLUTIONS

VICE CHAIRS: PETER OFFRINGA, LAWRENCE LIVERMORE NATIONAL LABORATORY, AND
MARK SUEKSDORF, LAWRENCE LIVERMORE NATIONAL LABORATORY

INTRODUCTION

The Project Management (PM) Working Group has been a very active group focused on addressing current project management issues and process developments across the DOE complex. The objectives are aimed at providing a multi-year perspective on efforts to continually improve project execution. The vision is to:

- Enhance project management capability and execution to meet DOE critical mission requirements in a way that delivers:
 - More reliable performance
 - More cost effective delivery
 - The capability to sustain performance in the future

The strategies to achieve this vision are as follows:

- Institutionalize the PMWG as a “go to” source of effective, proven project and construction management processes and tools, which can be used by project management and contract management organizations responsible for executing DOE work.
- The PMWG will promote the on-going assessment of organizational and project performance, focused on driving timely corrective action to prevent failures.
- The PMWG will support EFCOG and member company initiatives in the human capital arena, focusing on program and project management functions.

MEMBERSHIP

The membership of the PMWG has grown steadily over the past two years, primarily due to an effort to engage field practicing project managers in the group’s activities. Using lessons learned from work with National Aeronautics and Space Administration counterparts, the PMWG has established a practice of case study presentations at the semi-annual meetings to encourage establishment of working networks for knowledge sharing. This approach has been well received by both the PMWG members and the DOE field project managers. Overall membership is about 80 participants, with 25-30 active members at any given point in time.

ACHIEVEMENTS

Consistent with the strategic objectives of the Working Group, focus in 2008 was on supporting DOE initiatives to enhance project management capability and increase sharing of project management knowledge across our membership. Key highlights of work accomplished in 2008 include:

- DOE has implemented a significant effort to develop 17 Implementation Guides to provide guidance for DOE Order 413.3A, “Program and Project Management for the Acquisition of Capital Assets”. EFCOG provided substantial subject matter expert support to this initiative, primarily from the PMWG, but with other Working Groups as well, notably the Engineering Practices Working Group, providing interface for Standard 1189, “Integration of Safety into

the Design Process". The PMWG also provided support to OECM to help address cross-cutting issues, review all guides for consistency, etc. Overall, the DOE Sponsors and Steering Committee have been very complimentary of the support provided by EFCOG.

- As an outgrowth of the Cost Estimating Workshop held in July 2007, a Cost Estimating Subgroup of the PMWG was formed under the leadership of Benny Reyes (Bechtel Manager of Estimating). The Cost Estimating Subgroup held its annual meeting in Charlotte, North Carolina on August 26-27. The meeting allowed the Subgroup to be introduced to and work with the newly formed DOE Office of Cost Analysis. The meeting focused on many issues important to the successful development of cost estimates in the DOE complex. Subgroup discussions included escalation, contingency, a DOE estimating database, the DOE cost estimating order, and estimating issues and concerns at CD-0. The Cost Estimating Subgroup provided review and comment support to the DOE Office of Cost Analysis on escalation and the new DOE cost estimating order.
- DOE set an objective to get the Department off of the General Accounting Office's "High Risk" agency list. The focus is the April 2008 Root Cause Analysis on contract and project management that addresses past project and contract performance issues, and the resulting July 2008 Corrective Action Plan (CAP) to address the root causes. The Office of Engineering and Construction Management (OECM) reviewed this initiative at the July PMWG meeting. There were 8 Corrective Measures in the CAP that were discussed at a high level:
 - Improve Project Front-end Planning
 - Enhance Federal Project and Contract Management Workforce
 - Improve Project Risk Assessment, Communication and Management
 - Align and Integrate Budget Profiles and Project Cost Baselines
 - Improve Independent Government Cost Estimates
 - Improve Acquisition Strategies and Plans
 - Improve Project Oversight and Management
 - Improve Adherence to Project Management Requirements

Through facilitated breakout sessions, the PMWG provided additional input from a contractor perspective. It was agreed that the PMWG should provide support to the Corrective Action Teams in 2009, using the approach employed for the 413.3 Guides.

- A new sub-team under the leadership of Mark Sueksdorf focused on "Project Management in the R&D Environment". The group met with the Project Management Institute and NASA to conduct some benchmarking and identification of similar efforts in the federal government. NASA's Principal Investigator training and curriculum were identified as noteworthy practices. The application needs and best practices will be assembled into a white paper and sent out for PMWG review.
- Work was initiated on development of a Project Management/Project Controls Tool Inventory. A model of the key components of Project Controls Systems was developed for consistency of terminology and discussed at the July PMWG meeting. It was agreed that having an inventory list as well as point contacts for the system experts would be very helpful as problems are encountered at the various sites. The next steps involve soliciting inventory information from the Working Group members during the fall. The inventory and contact list should be finalized in early 2009.
- The PMWG is collaborating with the Human Capital Working Group on human capital initiatives. The energy industry workforce is 5-10 years older than general industry. Retention rates are less than 50% in the first 3 years at the DOE sites. Needs include marketing and recruiting to highlight the good qualities of the energy industry and project management

profession. Order 412 is being rewritten and the portability and consistency needs will be addressed. Best Practices will be posted on the website. The PMWG will evaluate ways to support this effort in 2009.

- The PMWG continues to provide implementation support for Earned Value Management Systems (EVMS) via the EFCOG EVMS website and by providing cross site support for certification review preparation and follow-up for corrective actions. The PMWG is leading an effort to define a workable surveillance and recertification process, including contract transition. It is expected a formal recommendation will be developed to submit to DOE.
- At the request of NNSA, the PMWG coordinated contractor input to NNSA on the fixed price contract bid and cost estimating processes and current trends.

PLANNING FOR THE NEXT YEAR

A key focus of the PMWG in 2009 will be collaboration with DOE on the implementation of the Root Cause Analysis CAP. Due to resource limitations, DOE plans a phased approach to implementing the corrective measures with 3 targeted for the first year, 3 the second year and the remaining 2 the third year. The measures will be implemented with cross program teams and OECM, NNSA, Environmental Management, Chief Financial Office, and Procurement will take the lead on various measures. The PMWG believes there is value in providing contractor input to facilitate support and maintain achievability of corrective actions. OECM agreed with this assessment and will recommend PMWG to the CAP Sponsorship and Executive Steering Committee. Assuming agreement is reached, the January 2009 meeting of the PMWG, to be held in Herndon, Virginia (hosted by Northrup Grumman) will include planning and personnel assignments to support the three DOE Corrective Action Teams working in 2009.

In 2009, the Cost Estimating Subgroup will support and partner with the DOE's Office of Cost Analysis as it develops and matures. There will be many opportunities and challenges for us as we work together in these times of financial uncertainty, including the development of the DOE Cost Estimating manual, the DOE project cost database, and to address any other complex emerging cost estimating issues.

EFFECTIVENESS EVALUATION

As can be seen from the accomplishments noted above, it is believed the PMWG continues to add value for both the membership, and more importantly, the customer.

LESSONS LEARNED

The PMWG had three key lessons learned in 2008:

- It can be most productive and make meaningful contributions through close partnering with our customer, as evidenced by the 413.3 Guide development initiative. Having supportive sponsors in DOE is crucial to meet this objective.
- The Working Group needs to institutionalize the process to bring practicing field project managers together to network and share knowledge as the most effective means of disseminating lessons learned in project execution.
- Participating in EFCOG related activities continues to be a challenge for many contractor employees, especially as budget and work pressures increase. The Working Group will need involvement of the EFCOG Directors to ensure ongoing participation of key members.

RECOMMENDATIONS

The PMWG should continue to function. The development of a Construction Subgroup of the PMWG, with incorporation of the Infrastructure Management Working Group Construction Management Subgroup, should be pursued in 2009 to provide additional focus on this critical phase of project execution and the unique challenges facing the industry.

SAFETY ANALYSIS WORKING GROUP

CHAIR: ANDREW VINCENT, SAVANNAH RIVER NUCLEAR SOLUTIONS

VICE-CHAIR: BRAD EVANS, PACIFIC NORTHWEST NATIONAL LABORATORY

INTRODUCTION

The purpose of the Safety Analysis (SA) Working Group is to promote excellence in safety analysis applications and programs throughout the DOE and NNSA community. The SAWG is actively involved and integrated with facility and DOE customers to accomplish the following:

- Establish initiatives and priorities.
- Facilitate initiatives through Subgroups and task teams.
- Investigate safety analysis strategies, leverage experiences, and share lessons learned.
- Maintain safety analysis networking and interfaces using current technology.
- Provide a forum to effectively accomplish activities and conduct business.
- Train safety analysts, engineers, and managers.

MEMBERSHIP

The membership of the SAWG, and its three current Subgroups – Accident Analysis, Safety Basis, and Unreviewed Safety Questions – and its Training liaison function, has approximately 50 participants, and includes representatives from EFCOG member companies representing over 15 DOE and NNSA sites, national laboratories, and contractors that support their work. Relationships have also been developed with Environmental Protection Agency and Nuclear Regulatory Commission staff, and with the American Nuclear Society. During the year, over 250 people participated in SAWG activities. All safety basis professionals are welcome to attend SAWG workshops and training and participate in Subgroup initiatives.

ACHIEVEMENTS

SAWG accomplishments during 2008 included the following activities:

Annual Workshop

- One of the most significant SAWG activities each year is hosting the annual Safety Analysis Workshop. The workshop provides training, technical presentations, and panel discussions as it encourages interaction among the entire DOE community. The workshop is unique in that it is the only national forum of its type, bringing together many significant policy makers, line managers, analysts, trainers, reviewers and approvers of DOE safety basis-related activities, applications, and documentation. The 18th Annual Safety Analysis Workshop was held in Richland, Washington, May 2 - 8, 2008, sponsored by Fluor Hanford and Pacific Northwest National Laboratory. There were approximately 250 participants from the DOE, NNSA, contractors, and the Defense Nuclear Facilities Safety Board (DNFSB) who attended this workshop. This year's theme "The Nuclear Renaissance," focusing on the resurgent nuclear industry, continued the long-standing success the workshop has maintained by providing high quality training, outstanding exchange of information, and a venue for DOE and contractors to discuss safety basis compliance issues.
- Eleven different training courses were provided and over 150 DOE and DOE contractors attended one or more of these courses. The courses consisted of:

- Areal Locations of Hazardous Atmospheres (ALOHA)
- Safety Basis Document Preparation- Advanced (3009)
- Lab Specific Lessons Learned
- Introduction to Plutonium Metallurgy
- Human Performance Improvement
- Risk Analysis Fundamentals
- GENII
- 1189 Safety Design Integration
- Control Selection and Development of Technical Safety Requirements
- Unreviewed Safety Questions (USQ) Refresher
- Water Hammer in Industrial Piping Systems

Two hands-on computer code courses were also offered in ALOHA and GENII. These courses were offered to participants at no additional cost.

David Mathews, Director of the Division of New Reactor Licensing, U. S. Nuclear Regulatory Commission gave the keynote address and provided the attendees with a view of how the Nuclear Regulatory Commission is dealing with the re-emerging nuclear power industry.

SAWG Priorities Discussion Session, September 2008, Washington, DC

The SAWG and its Steering Committee met with nuclear safety leadership within DOE in Washington DC to discuss topics of current interest. The purpose was to help guide the SAWG in its focused efforts in support of DOE, and in support of the contractor community in accomplishing the objectives of the DOE. The resultant topics in order of the final priorities are listed below. The steering committee and the SAWG Subgroups will develop and / or continue implementation of actions to address the topics in the coming year.

- Implementation of 1189
- Criticality Analysis and Control Selection
- Revision of STD-3024
- Safety Digital Instrumentation and Control
- Addressing Chemical Hazards in Documented Safety Analyses
- Technical Safety Requirements (Specific Administrative Controls) Threshold
- USQ Guide Revision & Evaluation of the Safety of the Situation
- DNFSB Recommendation 2008-1
- Regulatory Stability
- Unmitigated Scenarios Guidance
- Lessons Learned from System Engineering Program (Engineering Practices Working Group)
- Independent Validation Review
- Safety Basis Supplement
- Safety Analyst Training

With the rise of criticality safety as a topic of interest, a decision was made that a Criticality Safety Subgroup needs to be established. The Criticality Safety Subgroup would work closely with the criticality safety community as a whole, and specifically concentrate on communications and integration with the American Nuclear Society Nuclear Criticality Safety (NCS) Division, as well as the DOE/NNSA NCS Criticality Safety Support Group. Membership in the Subgroup will be both safety basis and criticality safety practitioners. The Subgroup would also ensure close ties and

communication with the DOE NCS Program Manager in addition to the DOE Office of Health, Safety and Security sponsors for nuclear safety.

DOE-STD-1189-2008, "Integration of Safety into the Design Process"

Beginning in 2006, the SAWG - working with the Engineering Practices Working Group - led the effort with DOE to plan, develop, review, approve, and implement the new DOE Technical Standard DOE-STD-1189-2008, "Integration of Safety into the Design Process".

The Standard was approved and issued in March 2008, and the implementation phase has followed with the identification of other related DOE documents requiring revision, and to address a DNFSB concern with the way chemical hazards are analyzed.

Training on DOE-STD-1189 was developed, presented at recent Safety Analysis Workshops and posted to the EFCOG website. The SAWG is continuing work with DOE to support revision of the additional DOE documents, to establish a "Frequently Asked Questions" website, and to support specific training activities.

Safety Basis Supplement Paper

The SAWG published a paper on Safety Basis Supplements as potential input to DOE directives. The purpose of the paper is to define an acceptable means of preparing safety documentation for relatively short term planned activities that satisfies 10CFR830 safe harbors, but that minimizes impact to the full Documented Safety Analyses (DSAs) and Technical Safety Requirements.

Fire Analysis Paper

A paper on fire analysis development for Fire Hazard Analyses (FHAs) and DSAs was drafted, as a joint effort of the SAWG, the Engineering Practices Working Group, and DOE. The genesis of the paper was concerns over potential issues in the integration of FHAs and DSAs, and also with base fire analysis assumptions leading to DSA decisions. The paper is undergoing a final revision, and the SAWG will work with DOE toward integration of the paper into the directive system.

Specific achievements of each Subgroup in 2008 were as follows:

ACCIDENT ANALYSIS SUBGROUP (CHAIR: MUKESH GUPTA, WASHINGTON SAFETY MANAGEMENT SOLUTIONS)

The overall objective of the Accident Analysis (AA) Subgroup (SG) is to improve nuclear safety, manage operational risk, and achieve a better and more consistent understanding of the residual risk of nuclear operations through consistent implementation of accident analysis. These objectives are pursued in a prioritized, cost/effective manner.

- Members of the AA SG provided support in completing the HOTSPOT Gap Analysis and Code Guidance Report.
- AA SG members are coordinating with DOE-HQ on updating and adding new codes to the DOE Toolbox Codes.
- AA SG members supported the development of guidance on Integration of FHA and DSA.
- AA SG members provided technical topics for the DOE-HQ meeting that prioritized topics to be considered by SAWG in coming years

SAFETY BASIS SUBGROUP (CHAIR: ROD MCKEENHAN, OAK RIDGE NATIONAL LABORATORY)

The Safety Basis (SB) SG held a meeting on May 7, 2008 at Richland, Washington in conjunction with the SAWG Safety Analysis Workshop. At the SBSG meeting, there was discussion on identifying the highest priority issues for discussion with DOE in the planned Washington D.C. meeting, providing examples of site controls for validation of safety basis implementation, the need for DOE to clarify its position on application of the STD-1027 Guidance document; the need for a better understanding of assumptions for an unmitigated accident scenario analysis; status of response to DNFSB Recommendation 2008-1; completion actions for the Safety Basis Supplement whitepaper, and potential need to revise STD-3009 in consideration of STD-3007.

The SBSG hosted the 2008 Safety Basis Workshop at the Kirkland Air Force Base in Albuquerque, NM on October 23 and 24, 2008. Over 100 participants from DOE and contracting organizations were in attendance. The session topics were: (1) summary of issues from the September SAWG meeting with DOE in Washington D.C. ; (2) STD- 1189 implementation experiences; (3) chemical screening and modeling under STD-1189; (4) Independent Validation Review process examples and practices; (5) System Design Description (SDD) integration with the application of STD-1189 and need for updating the SDD standard; (6) status of Implementation Plan actions in response to DNFSB Recommendation 2008-1 for fire protection design requirements; (7) feedback to the pending revision of the Unreviewed Safety Question Guide to clarify response actions to potential inadequacies in the safety analysis; (8) development of a new standard for safety digital instrumentation based on application of standard ISA-84; (9) potential use of Appendix B of STD-1189 for incorporation into STD-3009 to address chemical hazards; (10) criticality and safety integration issues under Standards 3007 and 3009; (11) practices and weaknesses in application of specific administrative controls; and (12) safety basis training status and plans. The Workshop served to further the attendees' knowledge on these topics and to stimulate further progress in several of these areas.

The SBSG members participated in regular monthly telephone conferences to discuss new and pending developments of significance to the SB process and to offer lessons learned. The DOE sponsor was a regular participant and was helpful in offering insights for application to SB issues. The telephone conferences were also used to follow-up on issues and actions identified at the SAWG and SB Workshops.

UNREVIEWED SAFETY QUESTIONS SUBGROUP (CHAIR: MARK MITCHELL, LAWRENCE LIVERMORE NATIONAL LABORATORY)

The USQ Subgroup is a working group whose intent is to facilitate the objectives of the EFCOG as related to the particular area of the USQ process, including Justification for Continued Operations, Potentially Inadequate DSAs, Evaluation of the Safety of the Situation, and safety basis amendments. The purpose of the USQ Subgroup is for members to promote excellence in DOE USQ programs by sharing information and lessons learned, and by facilitating the application of information and techniques to the degree appropriate for their contract/facility.

The USQ Subgroup conducted monthly teleconferences as well as a working session at the Safety Analysis Workshop and panel discussions at the Safety Analysis Workshop and the Safety Basis Workshop. The USQ Subgroup also worked with the Safety Basis Subgroup on the Vital Safety Systems panel discussion.

The USQ Subgroup promoted, coordinated, and facilitated the active exchange of successful USQ best practices, procedures, lessons learned, and other pertinent information of common interest through the monthly USQ teleconferences, which included:

- Applicability of the USQ Process
- USQ Process Entry Conditions,
- Categorical Exclusions,
- USQ Screens,
- USQ Determinations,
- USQ Review/Assessment processes utilized by DOE contractors,
- Interface between the USQ process and institutional procedures,
- Interface between the USQ process and site-wide DSAs (aka Generic DSAs),
- Interface between the USQ process and DOE contract transition
- Interface between the USQ process and Occurrence Reporting,
- PISA, Evaluation of the Safety of the Situation, and Justification for Continued Operation,
- Initiation of Safety Basis Amendments,
- Training
- USQ reviews for quality assurance,
- Lessons learned from site-specific USQ procedure development and implementation, and
- Other USQ related lessons learned.

A paper was drafted on the "Evaluation of the Safety of the Situation". While that draft was prepared, much discussion evolved in the specific expectations of 10CFR830 and the USQ implementation guide on the subject. It became evident that some detailed work was necessary in better defining the expectations and terms, and thus a flowchart effort was commenced. A revision to the paper is in progress, and it is expected that the results will be used in 2009 for a revision to the implementation guide.

TRAINING LIAISON (CHAIR: JULIE JOHNSTON, LOS ALAMOS NATIONAL LABORATORY)

The SAWG is maintaining a liaison relationship to the Safety Basis Academy (SBA), due to its direct relevance to the interests and purposes of the SAWG. The SBA consists of 8 basic-level courses and 15 specialty-level courses. Nineteen of these were piloted during 2007-2008 with 4 courses to be piloted during 2009. The SBA is a collaborative effort with NNSA Chief of Defense Nuclear Safety – Authorization Basis Senior Advisor. Los Alamos National Laboratory supports this work as the technical lead for the SBA. Logistics, roles, and responsibilities need to be established for the DOE National Training Center as the distribution point-of-contact for the SBA courses for both federal and contractor sites. EFCOG SAWG representatives are involved in technical review of applicable courses when these are presented through the DOE National Training Center. Several of the courses are being considered for offering at the May 2009 SAWG annual meeting in Las Vegas, Nevada.

PLANNING FOR THE NEXT YEAR

The 2009 Annual Safety Analysis Workshop will be held in Las Vegas, Nevada, in May 2009, hosted by Nevada Test Site. Training, Subgroup meetings, technical paper presentations, panel discussions, and invited speakers will be featured. At the Subgroup level, these activities are planned in 2009:

ACCIDENT ANALYSIS SUBGROUP

- The AA Subgroup will continue to coordinate with DOE Headquarters on updating and adding the new codes to the DOE Toolbox Codes.
- The AA Subgroup will work with the Office of Emergency Management's Subcommittee on Consequence Assessment and Protective Actions in developing chemical consequence methodology.

- The AA Subgroup will work on a paper to address derivation of unmitigated accident analysis scenarios.

SAFETY BASIS SUBGROUP

- The SB Subgroup will conduct the 2009 Safety Basis Workshop in Albuquerque, New Mexico, on October 20 and 21.
- The Safety Basis SG will address actions in its scope by providing deliverables and assistance to improve safety basis practices. This potentially includes guidance on chemical hazards evaluation, Specific Administrative Controls, and Independent Validation Review.
- The Safety Basis SG will continue to hold monthly teleconferences to track progress, maintain awareness of DOE initiatives, and identify emerging issues.

UNREVIEWED SAFETY QUESTIONS SUBGROUP

- The USQ SG will complete the development of a USQ functional process map, and incorporate that into the white paper on ESS.
- The USQ SG will continue to conduct monthly USQ teleconferences on the aforementioned areas of interest to the DOE complex.
- The USQ SG will continue to work closely with other EFCOG organizations, such as the Safety Basis Subgroup.
- The USQ SG will hold appropriate discussion sessions at the 2009 Safety Analysis Workshop and Safety Basis Subgroup meeting.

TRAINING LIAISON

The SAWG will continue the liaison relationship with the SBA, and possible incorporation of selected courses in the May 2009 annual workshop in Las Vegas, Nevada.

EFFECTIVENESS EVALUATION

The SAWG continues to be a very effective Working Group as evidenced throughout 2008 by its widespread base of participation and its direct contributions in support of new DOE standards and guides on integration of safety into the design process and the USQ process,

LESSONS LEARNED

The SAWG and its supporting member companies should continue to consider increasing the priority of safety basis training. Also, the SAWG needs to deliberately enlist, train, and mentor younger participants in Working Group activities. Finally, the SAWG has benefited by working with other EFCOG Working Groups on several efforts this year. The integration of input from several technical disciplines from the various Working Groups has improved the quality and usefulness of the final products. In addition, the sharing of information among the Working Groups has promoted a better understanding for all members of the magnitude of issues confronting DOE contractors and has established new working relationships among EFCOG members.

RECOMMENDATIONS

The Safety Analysis Working Group should continue, including the Accident Analysis, Safety Basis, Training, and USQ Subgroups. Additionally, a Criticality Safety Subgroup should be established.

SAFETY AND SECURITY REGULATORY WORKING GROUP

CO-CHAIRS: WILLIAM LUCE, SAVANNAH RIVER NUCLEAR SOLUTIONS, AND
CONARD STAIR, OAK RIDGE Y-12

INTRODUCTION

The primary focus of the Safety and Security Regulatory (SSR) Working Group is on nuclear/radiological safety, worker safety and health, and information security in the context of DOE enforceable regulations throughout the entire life cycles of facilities and activities. The SSR Working Group was previously called the Price-Anderson Amendments Act Working Group but was renamed in 2007 in recognition of the DOE issuance and integrated enforcement focus on the requirements from 10 CFR 824 and 10 CFR 851. Relationships to other laws and regulations (e.g., DOT 49 CFR provisions) are included in the scope of the Working Group to the extent necessary to assist in the understanding of the relationships and interfaces. Coordination with other EFCOG Working Groups is appropriate and encouraged, especially where the technical aspects of the other Working Groups relate to DOE enforceable regulations.

The purpose of the Working Group is to enhance communications and cooperation with the DOE Office of Enforcement and to promote excellence at DOE facilities through the understanding and implementation of nuclear safety, worker safety and health, and classified information laws and regulations; information sharing; and application of lessons learned.

The objectives of the SSR Working Group are to:

- Provide planning and actions necessary to achieve the overall objectives of the EFCOG in the area of nuclear/radiological safety, worker safety and health, and classified information security regulatory activities.
- Promote, coordinate, and facilitate the active exchange of programs, practices, procedures, lessons learned, and other pertinent information on safety and security regulatory activities.
- Provide an avenue for communications to and from the DOE Office of Enforcement on matters of enforcement programs, expectations, clarifications, complex-wide issues, and guidance.
- Promote training and learning on safety and security regulatory activities by sharing of management and technical information among DOE contractors through mechanisms such as workshops, task teams, and conferences.

The SSR Working Group operates within the following scope:

- Safety and security compliance assurance, including noncompliance reporting.
- Conduct of enforcement investigations, conferences, and program reviews.
- Graded or tailored approaches to safety and security regulation implementation, including appropriate benchmarking activities.
- Working relationships with regulatory counterparts (e.g., DOE Coordinators and DOE-HQ Office of Enforcement personnel).
- Addressing other issues as identified by the DOE Office of Enforcement, EFCOG Executive Directors, EFCOG Sponsoring Director, and/or the Working Group Steering Committee.

MEMBERSHIP

Membership in the SSR Working Group has continued to be strong, with about 90 representatives of EFCOG member companies (more than 40), with subject matter expertise in enforcement, quality assurance, radiation control, safety analysis, root cause analysis, worker safety and health, regulatory compliance, legal matters, project management, and program management. The member companies not represented are generally those with little or no direct Price-Anderson Amendments Act (PAAA)/worker safety and health reporting or liability issues.

For the most part, the PAAA/worker safety and health Coordinators, Coordinator alternates, and staff from each of the company sites within the DOE complex are a part of the SSR Working Group membership. Some of the members are also members of other EFCOG Working Groups (most notably the Integrated Safety Management and QA Working Group and the Environment Safety and Health Working Group). The Working Group includes one Subgroup – the Peer Review Program Subgroup.

The SSR Working Group restructured its organization in late 2004 to better focus on the key issues important to our DOE Sponsoring Director and to be responsive to the needs and expectations of the EFCOG Directors. Leadership was shifted from a single Working Group Chair to two Co-Chairs. After four years of experience with this structure, the Co-Chair arrangement continues to be much more successful than originally anticipated. The Co-Chair structure allows more flexibility and spreads the workload such that the periodic crisis, and times of escalated workload, does not typically occur to both Co-Chairs simultaneously. However, the success of the Co-Chair arrangement is truly personality dependent in that the Co-Chairs must be able to work together and share a common vision. In addition, it continues to be appropriate that the Co-Chairs come from site contractors that are not funded through the same DOE Program Secretarial Officer.

ACHIEVEMENTS

The SSR Working Group held two working sessions during 2008; one was in the spring at the Nevada Site Office and the other was in the fall at Oak Ridge (Y-12). Both meetings were very productive. The spring meeting was attended by approximately 100 representatives from companies throughout the DOE Complex and by representatives from the DOE Office of Enforcement. Attendance at the fall meeting was understandably influenced (about 85 attendees) by contractor travel budget constraints and FY 2009 budget uncertainties. At both meetings, extensive presentations and discussions were held on Price-Anderson, worker safety and health, and classified information security issues, including lessons learned from recent enforcement actions, enforcement conferences, integrated program reviews and other interactions with the DOE Office of Enforcement. Attendees continually comment that this portion of the SSR Working Group meetings is extremely valuable, offering candid feedback on preparing for matters of escalated enforcement interest.

The spring meeting was fully coordinated with the DOE Office of Enforcement Annual New Coordinator Training. This proved to be very effective in permitting experienced contractor coordinators to participate in the training sessions with new contractor and DOE coordinators and to readily offer insights, respond to a variety of questions, and support breakout sessions associated with the training. The balance of the spring session included discussions of deliverables requested by the DOE Office of Enforcement, discussion of field and enforcement perspectives on 10 CFR 851 and 10 CFR 824, and a status update from the Peer Review Subgroup.

During the fall SSR Working Group meeting, considerable discussions were held in relation to the new Integrated Program Reviews initiated by the DOE Office of Enforcement in 2008 (two such reviews were completed at the time of the meeting). In addition, topics involving continuing training, trending

metrics/indicators, and self-disclosing events were discussed in the context of potential future initiatives. The balance of the fall session included discussions of field and enforcement perspectives on Price-Anderson, 10 CFR 851, and 10 CFR 824; and a status update from the Peer Review Program Subgroup.

The SSR Working Group also accomplished the following in 2008:

- In response to a request from the DOE Office of Enforcement, the Working Group provided contractor input with respect to issuance of civil penalties under 10CFR851 versus contract remedies. The EFCOG contractor community was not able to reach consensus on the exact conditions that would dictate the use of one of these enforcement options over the other, due to (for example) complexities in prime contracts, varying fee structures, work scope differences, and corporate factors. However, the SSR Working Group was able to provide a list of "possible influential factors" that could be encountered and could potentially impact the enforcement decision when selecting such options. The information was provided to the DOE Office of Enforcement in briefing slides and was discussed with the Office of Enforcement Director and staff at the spring Working Group meeting.
- In response to a request from the DOE Office of Enforcement, the Working Group provided contractor input with respect to credit that Voluntary Protection Program STAR status should have in relation to enforcement under 10CFR851. A briefing sheet was developed with joint participation from the ISM and QA Working Group and the ES&H Working Group. The briefing sheet covered possible enforcement considerations for DOE contractors who earn VPP certifications. These considerations were broadly focused on achieving excellence in occupational safety and health programs beyond "compliance". The information was provided to the DOE Office of Enforcement in March 2008 and was further briefed and discussed at the spring Working Group meeting.
- In response to a request from the DOE Office of Enforcement, the Working Group provided consolidated SSR Working Group comments on the proposed streamlined DOE Office of Enforcement Investigation Summary Report Template. The DOE Office of Enforcement developed a streamlined template for an Investigation Summary Report as an element to aid in expediently moving enforcement matters forward. SSR Working Group comments were provided through email communication on November 16, 2007 and further reviewed and broadly discussed at the spring SSR Working Group meeting.
- The SSR Working Group conducted peer reviews of member company Price-Anderson and Worker Safety and Health Programs, through the new Peer Review Program Subgroup, as of December 2007. The Peer Review Subgroup of the SSR Working Group has been scheduling and coordinating reviews with interested contractors. Three reviews were completed in 2008 and schedules are being developed for requested reviews in 2009. It was anticipated that one of the 2008 reviews would involve a joint effort with the DOE Office of Enforcement in an Integrated Program Review. Timing for such a joint effort in 2008 did not prove to be appropriate and this will again be considered in 2009.

PLANNING FOR THE NEXT YEAR

During 2009, the following SSR Working Group activities are planned:

- Conduct a spring Working Group meeting (tentatively scheduled for April 2009 at the Nevada Site Office) in conjunction with the DOE Office of Enforcement Annual PAAA/Worker Safety and Health/Security Coordinators Training. This joint session will permit the Working Group to

continue its special emphasis on an already effective working relationship with the DOE Sponsor.

- Conduct a fall Working Group meeting (tentatively scheduled for October 2009 at a site to be determined). Other than the standard emphasis on sharing lessons learned, the detailed plans for this session will be established by the Working Group Steering Committee following the spring meeting.
- Depending on the specific requests from contractors to conduct peer reviews at their sites, the Peer Review Subgroup will support those requests in 2009. It is expected that three to five reviews will be conducted with perhaps one review being a joint effort with the DOE Office of Enforcement as part of their planned Integrated Program Reviews in 2009. The Peer Review Subgroup will also undertake an activity to update the programs checklists to eliminate some duplication and to incorporate relevant aspects from the results of the DOE Office of Enforcement Integrated Program Reviews conducted in 2008.
- Working Group members have asked for a white paper that would provide further definition guidance on what is (or should be) considered a "self-disclosing event" -- an event not afforded full credit for enforcement mitigation purposes. (Some initial efforts on this activity were conducted in 2008, but further work is planned for 2009.)
- Two additional areas are in their initial phases of research and will receive some level of effort by the Working Group continuing from efforts in late 2008. These areas are in relation to:
 - Techniques for trending areas of Price-Anderson and worker safety and health non-compliances with an interest in the methods that can be used to make decisions on the need for further actions.
 - Areas that might benefit from some form of periodic or ongoing training either in conjunction with the annual training already conducted by the Office of Enforcement or as a more focused element of each Working Group meeting.

In 2009, the SSR Working Group plans to continue its strong interaction and coordination with other EFCOG Working Groups. Many of the 2007 and 2008 activities and products were the result of supporting efforts with the Integrated Safety Management and Quality Assurance, Environment Safety and Health, and Safeguards & Security Working Groups, and these interactions have proven successful. The Working Group also plans to continue its interaction with other groups within DOE and the contractor community, to deal with issues and topics of special interest.

EFFECTIVENESS EVALUATION

Efforts of the SSR Working Group are all geared toward overall support of the DOE desire to move the enforcement program from an "event-driven" to an "assessment driven" process. The SSR Working Group continued its excellent interaction with the DOE Office of Enforcement during 2008. Over the last three years, the SSR Working Group enhanced its partnership with DOE by restructuring meetings to effectively deal with key issues and hot topics important to both DOE and the contractor community. During this same time, the Working Group increased its relationship and partnership with other EFCOG Working Groups (most recently with the Environment Safety and Health Working Group and the Safeguards and Security Working Group) with focused involvement in implementation of 10 CFR 851 and enforcement of 10 CFR 824.

LESSONS LEARNED

The SSR Working Group has traditionally held a "contractor only" session on the first day of its spring and fall Working Group meetings. Subsequent sessions are then joint sessions with DOE participants. This long-standing arrangement continues to be viewed by attending members as very effective in

ensuring candid communications of some enforcement matters that can be sensitive to those presenting.

The Working Group continues to benefit from a strong DOE Sponsor and the commitment from the entire DOE Office of Enforcement to its success and effectiveness. Participation by the EFCOG Sponsoring Director over the last three years continues to demonstrate, to both the customer and to Working Group members, a positive and proactive commitment from the EFCOG Directors to the continued viability of the SSR Working Group. Elements of the spring 2008 SSR Working Group meeting were jointly attended by members from the Safeguards & Security Working Group. This arrangement worked well and consideration will be given to holding joint meetings with other Working Groups in the future.

The SSR Working Group will continue to monitor and report on its effectiveness and will adjust its approach, when necessary, to satisfy its DOE Sponsor and to meet the changing needs and expectations of the EFCOG member companies.

RECOMMENDATIONS

Based on the continued effectiveness of the SSR Working Group, it is believed that its scope and mission should be continued into the foreseeable future. It is also recommended that the two Co-Chairs structure of this Working Group be continued.

SAFEGUARDS AND SECURITY WORKING GROUP

CHAIR: JIM MULKEY, OAK RIDGE Y-12

INTRODUCTION

The vision of the Safeguards and Security Working Group (SSWG) is to promote excellence in safeguards and security across the complex with the purpose of providing a strong focus for meeting the DOE's safeguards and security challenges by enhancing the protection of special nuclear materials, classified matter, property, and cyber systems. Through the sharing of information and lessons learned, and by facilitating the application of information and techniques in an efficient and cost effective manner, the measured performance of security across the complex will consistently and continuously improve. The SSWG is focused on the physical protection of DOE assets, and its scope includes effective implementation strategies in response to complex-wide identified issues.

MEMBERSHIP

The SSWG membership continues to grow with the involvement of new members in newly identified tasks, with approximately 50 representatives participating throughout the year. sponsoring Executive Director. The SSWG is now composed of three Subgroups: Security, Cyber Security, and Material Control and Accountability (MC&A).

ACHIEVEMENTS

In 2008, the Working Group pursued and addresses critical Issues such as the implementation of the Topical Report on the Interface between Safety and Security, review of the DOE 413.3 guide on the implementation of security into project controls, and security metrics. Much of the focus at the Working Group level was on reestablishment of the Steering Committee with the first meeting held in October 2008. Additional work was focused on the charter development, revisions and establishing administrative controls for activities consistent with the EFCOG manual for the Working Group and the three Subgroups. Charter revisions and or new charters will be presented to the EFCOG board during the first quarter of 2009. Action tracking, formality of work scope definition documents and meeting templates were also put in place at the Working Group level for all Subgroups. A new Subgroup to cover the area of MC&A was initiated in the spring with a meeting of the NNSA sponsor and participants from across the complex. A charter, election of the Chair, Vice Chair, and Secretary and initial work scope was subsequently defined in the summer and fall, with the charter to be presented for approval in January 2009.

The SSWG's interests intersect with a number of other EFCOG working groups. For example, the implementation of 10 CFR 824 and 851, and the Price Anderson Amendment Act form an interaction with the Safety and Security Regulatory Working Group. A joint meeting was held in the spring of 2008. The meeting was beneficial to all participants in ensuring that work was not duplicated and simultaneously ensuring that critical elements were covered. In addition, through cross memberships, the SSWG maintains liaisons with other organizations such as the National Security Information Exchange, the Institute of Nuclear Material Management, the World Institute of Nuclear Security and the Nuclear Energy Institute. It is expected that implementation of 10 CFR 824 will continue to require interactions with the Safety and Security Regulatory Working Group during the coming year.

SECURITY SUBGROUP (CHAIR: JUDITH JOHNS, OAK RIDGE Y-12)

The Security Subgroup continues to be the most active of the Subgroups. The major issues initially identified as candidates for task activities included a review of pro-force injury rates, security metrics, security culture, security peer reviews, implementation of 10CFR 824, security policy, materials, control and accountability, and other issues of interest to the security community. Noting the extensive list of potential activities, the tasks were prioritized and focus was concentrated on the safety/security interface implementation, pro-force injury rates and security metrics.

Work on the safety and security interface implementation was considered to be outside the scope of the EFCOG charter and the implementation was deferred to the DOE program offices and line organizations. Work in the development and implementation of a methodology for a high level indicator of the security status of the complex was the focus of the “security metrics” task. The initial phase of the task was completed with a report which was provided to the DOE sponsors in the spring of 2008. The results of the work were also presented in various small forums to DOE personnel and with the EFCOG community at the 2008 annual meeting. Work was completed on the pro force injury rate with the report to be completed in the first quarter of 2009. The primary focus of the task was to provide an understanding and recommendations in reference to an apparent increase of pro force injury rates which exceeded that of the working population among DOE contractors. An increased interest in the revisions to the Impact Measurement Index emerged during the year. Therefore, a workshop for the review and training of the most recent revisions to the “Impact Measurement Index” for the evaluation of security items of concern was scheduled for December 2008. However, due to evolving revisions and changes to the new policy, the activity has been postponed until 2009.

CYBER SECURITY SUBGROUP (CHAIR: JOE RIDDLE, SAVANNAH RIVER NUCLEAR SOLUTIONS)

This Subgroup is focused on the growing threat to computer and information systems, and the need to track and demonstrate compliance with regulations. The Subgroup has been reconstituted during the past year with an emphasis on interaction between the DOE contractors and establishing the interface with the appropriate DOE sponsors. The coordination of major revisions to the charter and implementation of the revised charter have been the focus of the Subgroup this year. Much of the specific work activities have in large measure been performed by other forums which bring Chief Information Officer’s (CIO’s) and cyber security specialists together. These have included, for example, the Systems of Laboratories Computing Coordinating Committee (being replaced by the National Laboratory CIO Council), which represents the many the national laboratories but excluded the facilities. In addition, the split CIO functions between the DOE and NNSA have complicated cyber security policy and approach. With the organizational changes within the DOE, it is expected that the newly-reconstituted Cyber Security Subgroup will be significantly more engaged with the DOE and NNSA during the coming year.

MATERIAL CONTROL AND ACCOUNTABILITY SUBGROUP (CHAIR: GENEVA JOHNSON, NEVADA TEST SITE)

The MC&A Subgroup was established during 2008, following extensive discussions with the NNSA sponsor and MC&A specialists from across the complex. One of the initial contributions of the group was the open communications which were established between contractor sites on MC&A related issues and best practices. The issues formed a basis of prioritized work which the group would focus on with the NNSA sponsor concurrence. The most significant item to be addressed with the sponsor’s concurrence was a review and subsequent recommendations on the reporting associated with the Nuclear Material Management and Safeguards System. The prioritized list will be maintained and updated as appropriated to support the program initiatives across the complex.

PLANNING FOR THE NEXT YEAR

The SSWG will complete the membership of the Steering Committee and convene its Steering Committee meetings to coincide with the Working Group and Subgroup meetings. Also, the revised SSWG charter will be forwarded to the EFCOG Board of Directors thru the Sponsoring Director for Approval. The Subgroup's revised charters as approved by the Sponsoring Director will be attached for information.

Other initiatives in 2009 planned for the Working Group are:

- Continued interaction with the Safety and Security Regulatory Working Group and other Working Groups
- Develop a more comprehensive membership for the Working Group and the Subgroups to be inclusive of appropriate EFCOG members.
- Develop an EFCOG SSWG presentation for use in interactions between the SSWG and interface organizations.
- Develop a relationship with the World Institute for Nuclear Security thru the exchange of information and expertise.

For the Security Subgroup in 2009, the following plans have been identified:

- Initiate task group and work to develop a methodology for identification and characterization of the security culture for organizations individually or complex wide.
- Continue work to support the implementation recommendations of the complex wide security metrics task.
- Continue work to issue a finalized report with recommendations for the Protective Force injury rate task activity.
- Develop a review and training workshop for support of the new Impact Measurement Index (IMI) policy implementation.
- Develop and implement a peer review process to support the implementation of the 10CFR 824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations"

For the Cyber Security Subgroup in 2009:

- Establish a prioritized list of issues to be considered for task activities with concurrence of the DOE/NNSA sponsors.
- Establish well-defined DOE/NNSA sponsors to support the Cyber Security Subgroup activities.

For the Material Control and Accountability Subgroup in 2009:

- Finalize the report to include a review of the NMMSS reporting system. The review will include recommendations for the DOE/NNSA sponsors.

EFFECTIVENESS EVALUATION

The SSWG has a significant role to play within the EFCOG community; the full benefits and contribution that can be made to improving the overall effectiveness and efficiency of the complex security has not yet been achieved. However, there has been significant improvement in the communication across the complex in many areas most specifically that of interactions between contractors and the newly

established Office of Enforcement within DOE's Office of Health, Safety, and Security. Their engagement in the quarterly Working Group and Subgroup meetings has been shown to be valuable to the individual sites in the open communication and dialogue. The value of the SSWG to NNSA continues to improve as more and more comprehensive complex-wide tasks are supported.

LESSONS LEARNED

The SSWG competes with other security initiatives across the DOE and NNSA enterprise. A concerted effort is required to ensure that there is not a duplication of task and that the groups work together in a supportive fashion in lieu of a stovepipe contentious relationship.

RECOMMENDATIONS

The Safeguards and Security Working Group should continue in 2009. here are a number of challenges for this Working Group that should be considered by the EFCOG Board of Directors. In particular, the Cyber Security Subgroup charter has been amended to be chaired within the SSWG and not chaired as part of the System of Labs Coordinating Committee. The changes will be noted in the revised Subgroup charter submitted as approved by the Sponsoring Director. The SLCCC is no longer existent,, being replaced by the National Laboratory CIO Council. It is recommended that a working relationship be established with the National Laboratory CIO Council and other cyber professionals within the complex.

EFCOG WEB PAGE

As a lessons learned organization, dissemination of information promptly and easily is essential to EFCOG's effectiveness. The EFCOG website is a critical tool serving this purpose. During the past year, Barbara Pierre, EFCOG Coordinator, and Ed Yatsko, Website Coordinator, continued to serve as website administrators, performing daily maintenance of the website to assure that data from contractors, Working Groups and DOE is up-to-date and consistent with the EFCOG database.

In 2008, the EFCOG website saw an increase in the number of Working Groups, Subgroups and Task Groups which required webpage development and support. EFCOG website administration now includes support for 14 Working Groups with over 30 Subgroup/Taskgroups, and maintenance of over 14,300 individual web pages.

In 2008, the EFCOG website saw an increase in average use, with over 75,000 visitors viewing over 373,000 pages throughout the year. Table 5 provides an overview of monthly usage for 2008.

TABLE 5. 2008 MONTHLY WEBSITE HISTORY

Month	Unique visitors	Number of visits	Pages	Hits
Jan 2008	6147	9112	29110	152810
Feb 2008	5943	8778	29410	148065
Mar 2008	6351	9629	40904	178817
Apr 2008	6747	9776	32167	141336
May 2008	6331	9091	26181	112160
Jun 2008	7689	10602	31947	113822
Jul 2008	6807	9531	25344	104331
Aug 2008	5736	8549	25236	112308
Sep 2008	5690	8860	29638	141882
Oct 2008	5986	9391	37617	165280
Nov 2008	6322	9962	31136	122824
Dec 2008	5894	9404	34681	114467
Total	75643	112685	373371	1608102

Based on the usage history, modifications to the website are ongoing and are a result of recommendations and suggestions received from the members and the DOE community. 2008 also saw a substantial increase in the use of the discussion forums by EFCOG members and DOE. The number of discussion forums increased to 46 and now has 296 registered members. In addition to website maintenance, the EFCOG web administrators also provided support for 34 Working Group meetings and workshops.

It is EFCOG's continued goal to make the website as useful as possible, and EFCOG encourages all parties using the website to provide comments to the web administrators on how the EFCOG website can be made more useful and user-friendly. One can do so by logging onto the Feedback Section of www.efcog.org, or by contacting the website administrators at bpierre@cox.net and eyatsko@efcog.org.

EFCOG FINANCES

Longenecker and Associates, Inc. (L&A) provides Executive Council and Board of Director support and coordination, Working Group integration and coordination, strategic planning, and day-to-day administrative support, including web page maintenance to the EFCOG members and Working Groups. John Longenecker of L&A serves as the Managing Director for EFCOG, overseeing and coordinating all activities of the organization, and is the direct liaison between the EFCOG membership, Board of Directors, Chair, and administrative staff. Mark Frei of L&A became the Working Group Coordinator late in calendar year 2008. The support staff provides a focal point for coordination of EFCOG activities, tracking of action items, regular communication with DOE and members, and for maintaining and disseminating a central base of EFCOG data. The support contractor is also responsible for coordinating activities with DOE and member companies, developing and distributing the EFCOG Overview, Annual Report, trifold brochures, and other documents, contacting prospective new members, maintaining the EFCOG Executive Council and Working Group Operating Manual, developing and maintaining the EFCOG library of records and information, supporting the Directors, Working Groups and Subgroups, and other duties as assigned by the EFCOG Chair.

Funding for administrative support is provided by EFCOG members who annually pay a pro rata share of the support costs for EFCOG. The funds are collected, administered and disbursed by the EFCOG Chair. Receipts for members' FY2008 pro rata shares and disbursements for services are shown in Tables 6 and 7.

OCTOBER 1, 2007 – SEPTEMBER 30, 2008

Beginning Balance as of 10-01-07		\$ 248,702.94
Receipts		
FY-2008 Membership Renewals	\$117,000.00	
FY-2009 Membership Renewals	\$39,000.00	
Interest	\$2,051.87	
Total Receipts		\$ 158,051.87
Disbursements		
Support Service Contractor		
Longenecker & Associates, Inc. ¹	\$246,991.86	
IM Working Group Meeting Expense ²	\$6,716.85	
Total Disbursements		\$ 253,708.71
Ending Balance as of 09-30-08		\$ 153,046.10

TABLE 6. 2008 EFCOG FUND ACCOUNT RECAP

¹ Support Service costs include:

- a. Strategic Planning, Managing Director, Working Group Coordinator Support
- b. Administrative Support
 - Working Group, Member Company Coordination
 - Database Development and Maintenance
 - Internet Service (IPowerWeb)
 - Website Development and Maintenance
 - Meeting Logistics and Support
- c. Printing and Distribution of Newsletter, Trifolds, Periodicals
- d. Executive Council Meetings, Annual Meeting
- e. Quarterly Board of Directors' Meetings
- f. Strategic Planning Meetings
- g. Working Group Chair Meetings
- h. Travel

² Infrastructure Management Working Group meeting expenses withdrawn from fund deposited with EFCOG in 2007.

TABLE 7. 2008 EFCOG MEMBERSHIP RENEWALS

COMPANY	TYPE	FEE
ABS Consulting, Inc.	A	\$3,000
AECOM Government Services	F	\$6,000
AREVA Federal Services	F	\$6,000
Argonne National Laboratory	F	\$6,000
B&W Pantex	F	\$6,000
B&W Y-12	F	\$6,000
Babcock & Wilcox	F	\$6,000
Bartlett Services, Inc.	A	\$3,000
Bechtel National, Inc.	F	\$6,000
Bechtel SAIC	F	\$6,000
Booz Allen Hamilton	F	\$6,000
Brookhaven National Laboratory	F	\$6,000
Bullard Company	A	\$3,000
Burns and Roe	F	\$6,000
CDM Federal Programs Corporation	A	\$3,000
CH2M HILL Hanford Group, Inc.	F	\$6,000
Ch2M Hill, Inc.	F	\$6,000
CH2M Hill-SRS	F	\$6,000
CH2M-WG Idaho	F	\$6,000
CSC Applied Technology Division	F	\$6,000
Dade Moeller & Associates	F	\$6,000
EG&G Technical Services Inc.	A	\$3,000
EnergySolutions, LLC	F	\$6,000
Epsilon Systems Solutions **	A	\$1,500
ESI International	A	\$3,000
Fluor Government Group	F	\$6,000
Fluor Hanford	F	\$6,000
Honeywell FM&T	F	\$6,000
Idaho National Laboratory	F	\$6,000
Jacobs Engineering Group, Inc.	F	\$6,000
Jefferson Science Associates, LLC	A	\$3,000
Kiewit Federal Group, Inc.	A	\$3,000
L&L Associates	A	\$3,000
Lawrence Berkeley National Laboratory	F	\$6,000
Lawrence Livermore National Laboratory	F	\$6,000
Lockheed Martin Information Technology	F	\$6,000
Los Alamos National Laboratory	F	\$6,000
Merrick & Company	A	\$3,000
Midwest Research Institute	F	\$6,000
National Security Technologies	F	\$6,000
Northrop Grumman Shipbuilding	F	\$6,000
Nuclear Fuel Services **	A	\$1,500
Pacific Northwest National Laboratory	F	\$6,000
Parsons	F	\$6,000
Pro2Serve	A	\$3,000
Project Enhancement Corporation	A	\$3,000
QinetiQ North America	F	\$6,000
S.M. Stoller Corporation	F	\$6,000
Sandia National Laboratories	F	\$6,000
Schneider Electric	A	\$3,000
Shaw Group	F	\$6,000
TerranearPMC, LLC	A	\$3,000

COMPANY	TYPE	FEE
Tetra Tech FW, Inc.	F	\$6,000
Theta Pro2Service Management Company	F	\$6,000
TLI Solutions	F	\$6,000
URS Washington Division	F	\$6,000
UT-Battelle (ORNL)	F	\$6,000
Vista Engineering Technologies, LLC	A	\$3,000
Wackenhut Services Inc.	F	\$6,000
Washington Closure Hanford	F	\$6,000
Washington Savannah River Company	F	\$6,000
Washington TRU Solutions (WIPP)	F	\$6,000
West Valley Nuclear Services Company	F	\$6,000
TOTAL MEMBERSHIP FOR 2008		\$324,000

** Pro-rated F = Full Member A = Associate Member