

SAFEGUARDS AND SECURITY WORKING GROUP

2009 ANNUAL REPORT

Chair: Jim Mulkey, Babcock & Wilcox Y-12 National Security Complex

Vice-Chair: Reuben McGilvary, Babcock & Wilcox Pantex

INTRODUCTION

Vision – The vision is to provide a forum for continuous improvement in safeguards and security areas of carrying out the Department of Energy (DOE) and National Nuclear Security Administration (NNSA) missions.

Purpose - The purpose of the Safeguards & Security Working Group (SSWG) is to provide a strong focus for meeting the DOE security management challenge by enhancing the protection of special nuclear material (SNM), classified matter, property, and cyber systems. The Working Group promotes excellence by sharing information and lessons learned and by facilitating the application of information and techniques. The scope of the SSWG includes all elements of safeguards and security (S&S) to include cyber security. The SSWG enables the successful execution of DOE missions and programs by helping ensure appropriate security in a cost effective and safe manner and by providing a forum for the active exchange of ideas, approaches, and lessons learned among DOE and its contractors.

Objectives – The objectives of the SSWG are to:

- Enable the successful execution of DOE missions and programs by helping ensure appropriate security in a cost-effective manner
- Provide a forum for the active exchange of ideas, approaches and lessons learned among DOE contractors and with DOE that:
 - Enhances collaboration among DOE contractors so that the latest technology and methods are brought to bear
 - Encourages interaction between DOE management and contractors on complex wide objectives, issues and projects
 - Provides value-added feedback and recommendations to DOE
- Serve as a consensus board for emerging security directives proposed by DOE and for the interpretation and consistent application of existing DOE directives
- Encourage planning and actions necessary to ensure that the overall objectives of EFCOG are met in the area of security
- Promote training and continuous improvement by sharing management and technical information and lessons learned among contractors through vehicles such as websites, workshops

Scope - The areas of interest covered by the SSWG include both S&S and cyber security. S&S includes the protection of SNM, classified matter, personnel security, and both equipment and real property. Cyber security includes both classified and unclassified computer, communication and information systems. The cyber security area will also address selected Information Technology topics of interest to the DOE community. The SSWG will identify those topics or issues important to DOE meeting the security challenge and present them to DOE management. The SSWG will facilitate interaction with outside organizations and experts regarding the application of security principles

and methods in the DOE complex. The SSWG will communicate with other EFCOG and contractor groups to ensure activities are fully coordinated. While the SSWG will not lobby, advocate independent positions, or try to change DOE policy, the SSWG practices as applied to DOE missions may be discussed and suggestions for improvement made to the DOE.

MEMBERSHIP AND ORGANIZATION

MEMBERSHIP

Since the revitalization of the SSWG, membership has significantly increased with 44 active members and an average of 65 attendees at each of the quarterly meetings. This growth is expected to continue at an accelerated rate as the SSWG integrates with other EFCOG Working Groups. There are 16 EFCOG member companies who participate in the SSWG. The SSWG strives to keep a complement of representation from these member companies; vacancies are filled as they occur. New membership is generally achieved by individual networking and peer relationships.

Relationships have been developed with these EFCOG Working Groups: Integrated Safety Management & Quality Assurance, Contractor Assurance, Human Capital, and Safety and Security Regulatory Working Groups, as well as with the Institute of Nuclear Power Operations (INPO); Nuclear Regulatory Commission (NRC); Department of Homeland Security; Defense Nuclear Facility Safety Board; World Institute of Nuclear Security; and the United Kingdom's Nuclear Decommissioning Authority.

ORGANIZATION

Leadership in the SSWG is comprised of:

Chair: Jimmie Mulkey, Babcock & Wilcox Y-12 National Security Complex

Vice-Chair: Reuben McGilvary, Babcock & Wilcox Pantex

Secretary: Joe Riddle, Savannah River Nuclear Solutions

There are three subgroups in the SSWG, with Chairs as follows:

- Material Control & Accountability Subgroup Chair: Geneva Johnson, University of Tennessee-Battelle (Oak Ridge National Laboratory)
- Cyber Security Subgroup Chair: Joe Riddle, Savannah River Nuclear Solutions
- Physical Security Chair: Judy Johns, Babcock & Wilcox Y-12 National Security Complex

EFCOG Sponsoring Director: Michael Bebon, Brookhaven National Laboratory

DOE and NNSA Sponsors: Bradley Peterson, NNSA; Ted Wyka, NNSA, Amy Whitworth, NNSA; Glenn Podonsky, Office of Health, Safety, and Security (HSS); and, Steve Crowe, NNSA

With regard to succession planning within the SSWG, the SSWG Chair rotation occurs in January 2010 with the Vice-Chair moving to the Chair and a new Vice-Chair to be elected. For the Physical Security Subgroup, the Chair is to rotate out in January 2010 as well, with the current Vice-Chair to become the Chair and a new Vice-Chair to be elected. For the Material Control & Accountability and Cyber Security Subgroups, the officers have one year remaining on their terms.

ACHIEVEMENTS

During FY 2009, the SSWG held its first FY 2009 meeting at Brookhaven National Laboratory, October 22-23, 2008, its second meeting at Lawrence Livermore National Laboratory, January 28-29, 2009, and its Spring meeting at the Nevada Test Site, April 23-24, 2009 with the Safeguards and Security Regulatory Working Group. The SSWG also held a strategic planning meeting in May 2009 in Las Vegas, Nevada. Subgroup officers and the SSWG Chair met with various sponsors (NNSA, Environmental Management, Cyber Chief Information Officer, and HSS) throughout the year.

The SSWG also accomplished the following in FY 2009:

- Protective force workers continue to rank at the top of the list of employees injured as categorized by operation type. The nature of the type of work, types of risk, and hours of exposure make zero rates unlikely. Through improved data collection and analysis, the Working Group identified methods to enhance the ability to better identify problem areas (activities, days of the week, hours of the day, pre-work preparations, etc.) and take proactive steps to minimize injuries and illness to protective force employees.
- A security peer review process was developed in coordination with HSS to provide a method for participating contractors to better manage their implementation of 10CFR824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations" – specific to information protection. This process provides an assessment tool for contractors to consistently identify and implement information protection and assurance program elements. When used, it provides continuity in the peer review process associated with 10 CFR 824. The process was field tested at three sites and was well received. The pilot reviews conducted have demonstrated the value of the process to identify deficiencies, minimize the risk, and mitigate damages should an incident occur. The task work is complete and the report is in final draft.
- DOE is in the process of revising the existing impact measurement index (IMI) tables. A task was initiated to review the draft revised tables before they went into the DOE formal review process (RevCom). A team of contractor subject matter experts worked with DOE to review the tables and comments, and recommendations were provided.
- The SSWG conducted a review and comment on the "Draft NNSA Office of Defense Nuclear Security, Safeguards and Security Evaluation and Performance Assurance Program" implementation manual for the NNSA.
- The SSWG conducted an informal review and comment of the proposal that DOE adopt the national Executive Branch standard of issuing traditional security clearances (Top Secret/Secret/Classified) for access to national security information, and afford access to restricted data via complimentary Q-level or L-level access authorizations.
- The Working Group finalized the report on the review of the Nuclear Material Management and Safeguards System. The report included recommendations for the DOE and NNSA sponsors.
- The SSWG developed a standard EFCOG/SSWG presentation for use by the membership in the promotion of EFCOG and the SSWG specifically.
- The Working Group provided information to the Board for member tracking capability using specific data base software.
- The Cyber Security Subgroup had members attend the DOE Cyber Security Conference in

Henderson, Nevada in May 2009.

- The Cyber Security Subgroup began to focus on making recommendations and comments on DOE Orders that affect cyber security. Draft recommendations have been developed for social engineering tools.
- The Cyber Security Subgroup briefed Sandia National Laboratory members on lessons learned from Savannah River Site, Hanford and Yucca Mountain on DOE- Headquarters cyber security audits. Also, they were briefed on lessons learned from the Oak Ridge East Tennessee Technology Park cyber security system test & evaluation conducted by DOE- Headquarters, as well as being briefed by Sandia National Laboratory on a recent “Cyber Security Incident Response Program” that they had successfully completed.
- The Cyber Security Subgroup began working to establish relationships with the National Laboratories Chief Information Officers council.

PLANNING FOR THE NEXT YEAR

Planned achievements during FY 2010 include the following:

- When the new DOE IMI tables and policy are developed, the SSWG will coordinate, sponsor, and assist in the development and presentation of a workshop. The workshop would be designed to provide consistent implementation of the new process. Major emphasis would be placed on decision trees and their consistent application across the complex. Also, the SSWG plans to develop and pilot an IMI workshop for use across the DOE complex.
- The SSWG will complete the protective forces worker safety task, with publication of the final report in January 2010.
- The SSWG will complete the final report on the 10CFR824 peer review process in January 2010.
- The Material Control & Accountability Subgroup will develop for implementation and pilot the “In Teach” methodology as applicable for this functional area.
- The SSWG will hold its Fall meeting in October 2009 at Sandia National Laboratory, and its Winter meeting at Oak Ridge National Laboratory in January 2010. Continuing its interaction with the other EFCOG Working Groups, the SSWG will attend the Integrated Safety Management & Quality Assurance Working Group meeting in Las Vegas, Nevada in November 2009, and hold a joint meeting with the Safety and Security Regulatory Working Group and the Contractor Assurance Working Group in April 2010 in Las Vegas, Nevada.
- The SSWG plans to more effectively utilize its EFCOG standard presentation at collaborative meetings with other groups and organizations.
- Continue to cultivate the relationship with the World Institute for Nuclear Security and the United Kingdom’s Nuclear Decommissioning Authority.
- Continue collaboration for proposed work between the Los Alamos Lessons Learned Center and the SSWG. The SSWG plans a visit in November 2009 to the Los Alamos Lessons Learned Center as a part of the NNSA metrics task development; this initiative would be to develop a set of metrics which depict the health of S&S programs across the NNSA enterprise.
- Develop a white paper as a proposal to NNSA for a task regarding internet social networking.

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 DOE HSS's Office of Enforcement. Their engagement in the 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

It is recommended that the Working Group continue in FY 2010, with increased emphasis in the cyber security area, coordinating its efforts with the National Laboratories Chief Information Officers council.