EFCOG
ENERGY FACILITY CONTRACTORS GROUP

ANNUAL REPORT

2020

EFCOG's Mission

Maximize DOE/NNSA mission success by achieving management and operational excellence.

VALUE PROPOSITION

- A comprehensive network of leading companies partnering with DOE to:
  - promote safe, secure, and effective operations
  - develop, share, and advance innovative practices
  - deliver cost-effective solutions to challenges and issues
  - strengthen performance measurement and accountability
- Access to unmatched leadership and experience across member sites and companies
- A collective voice for DOE/NNSA contractors across missions, functions, and sites

NOTE FROM THE CHAIR

As the Energy Facility Contractors Group (EFCOG) moves into its fourth decade of working to improve operations across the Department of Energy (DOE) complex, new challenges continue to emerge. Formed by contractor executives with the goal of working together to address common issues and problems within DOE/National Nuclear Security Administration (NNSA), EFCOG strives to improve operations as well as reduce overall costs and protect worker safety and the public. From unique nuclear operations to safeguarding our nation's strategic nuclear materials for weapons, EFCOG initiatives improve the efficiency and safety of DOE/NNSA operations. However, this year new operational and remote work challenges have emerged from the ongoing pandemic as well as threats from cybersecurity attacks from foreign entities.

EFCOG has had an extraordinary year. Within EFCOG, we formulated our ***top Strategic Priorities:***

- Safe, Secure and Effective Operations
- Ensuring Long-Term Availability of Critical Equipment, Supplies and Infrastructure
- Assuring that Projects Are Completed on Cost and Schedule
- Recruit, Develop, and Retain the Right People to Ensure Future Mission Needs are met

In addition to our strong network of subject matter experts in our Working Groups, the Board specifically took on some of these initiatives to assure access to senior leaders in our contractor community. These initiatives cascaded out of our strategic priorities and included:

- Continued improvement in the areas of Safety, Security and Quality
- Sharing of COVID-19 Lessons Learned
- Improvements in Human Capital to assure a pipeline of the future workforce
- Risk Communications and Stakeholder relationships
- Supply Chain issues including issues brought on by COVID-19
- Performance Assurance and Quality

- Continued improvements in Project Management
- Back to Work/Return to Full Operations Protocols

We continued to provide constructive and cost-efficient results to DOE/NNSA as well as providing a forum for a strong network of subject matter experts on various technical areas.

EFCOG continues to operate utilizing six specific working groups:

Project Delivery	**Safeguards and Security**	**Safety**
Waste Management	**Cybersecurity**	**Training**

The working groups represent the best and the brightest of the subject matter experts throughout the DOE programs, laboratories and sites. Our groups this year have worked on several technical focus areas and have provided numerous best practices. This includes areas such as Earned Value Management System (EVMS) and development of the EVMS Maturity Scorecard, accelerated deployment on online training to accommodate the shift to remote training capability, an Export Control Best Practice Guide, Cybersecurity and Physical Security Integration Guide, Best Practice on Code of Record, Best Practice on Packaging and Shipping Radioactive Material, and guidance on addressing workplace stress caused by COVID-19 and how to address it in order to reduce errors by employing Human Performance Improvement principles.

We continue to work with sister organizations such as the National Laboratories Directors Council, the Energy Communities Alliance (ECA), and the Institute of Nuclear Power Operations. We co- sponsored the National Cleanup Workshop in a virtual setting which allowed for the continued technical exchange between the contractor community and the Federal government even in a remote environment.

This report summarizes the accomplishments of the working groups over the past Fiscal Year 2020 and lays out initiatives and deliverables for the upcoming Fiscal Year 2021. The full accomplishments as well as the full work plans are available on the EFCOG website.

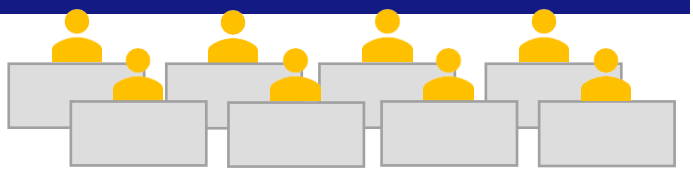
I would like to thank the hard work of our working groups as well as the Board of Directors and look forward to the 2021 tasks that they will achieve to continue to improve the operations of the DOE/NNSA facilities as well as the new strategic initiatives that we are pursuing. Thank you all and we look forward to another productive year together.

Sincerely,
Michael Lempke
Chair, Energy Facility Contractors Group

The EFCOG organization arose from an initiative by contractor executives to work together to improve operations across the DOE complex and a challenge from the then Secretary of Energy to tackle common problems facing DOE sites and laboratories. That remains the core of our mission today – to maximize DOE/NNSA mission success by achieving management and operational excellence. EFCOG has grown to an organization that has over 110 members representing the prime contractor community as well as the small business community that support the DOE/NNSA operations.

During decades of service, EFCOG has continued to demonstrate the value of contractors across the DOE complex working together and in coordination with DOE/NNSA at the Headquarters and the field level. Fiscal year 2020 was possibly the most challenging year in utilizing this partnership in addressing the COVID-19 threat to our operations and our workforce. We focused on ensuring that we were working on the most crucial issues within the DOE to provide expertise and resources where it was needed to address critical operations and personnel issues caused by the pandemic. By utilizing its senior management Corporate reach back as well as our strong network of subject matter experts (SMEs), we were able to address a myriad of issues that this fiscal year brought.

BOARD OF DIRECTORS



The Board of Directors is elected by the Executive Council from the membership and serves as the governing entity for EFCOG's day-to-day operations. We continued to work with DOE on several major efforts. First, we continued a multi-pronged effort to reconnect EFCOG with the DOE Office of Environmental Management (EM) Field Office Managers, including participation by field managers in EFCOG Board meetings, and discussion of key issues such as contractor assurance, revision of the DOE Project Management Order, and acquisition planning.

We worked to establishing the EFCOG Strategic Priorities which are identified in Figure 1. This focus prompted some Board initiatives that were headed up by our Board membership with support from our SMEs in the Working Groups. This focus allowed for a EFCOG/NNSA/DOE dialogue on issues facing the complex and was invaluable when the pandemic hit in maintaining an open and frequent dialogue on how to address the evolving pandemic issues.

The Board also worked closely with the Office on Enterprise Assessments in the collection of Lessons Learned from the COVID-19 response. In addition, EFCOG held a series of Lessons Learned WebEx sessions which included DOE and EFCOG presentations, presentations from our Corporate members on their global response, and a dialogue with the U.K. and Canada on COVID-19 impacts and lessons learned.

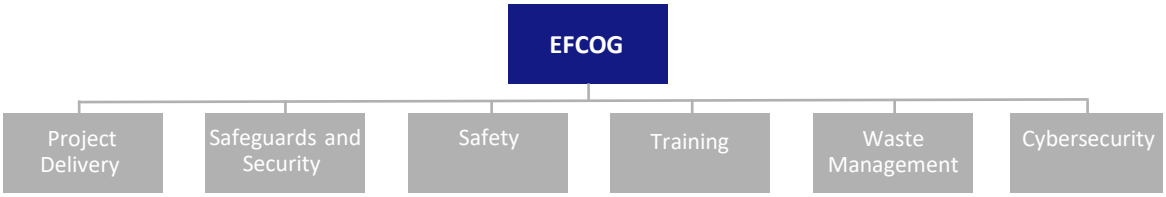
In September, we again co-sponsored, with ECA and DOE-EM, the National Cleanup Workshop. While the Workshop was shifted to a virtual workshop, it allowed for a continuing dialogue on the top issues facing the cleanup program.

FISCAL YEAR 2020 BOARD OF DIRECTORS

Chair	Michael K. Lempke	Huntington Ingalls Industries
Vice-Chair	Sandra Fairchild	Savannah River Remediation LLC
Vice-Chair Elect	Kelly Beierschmitt	Los Alamos National Laboratory
Directors	Jack Craig	SNC Lavalin-Atkins
	Eric Freeman	Leidos
	Tom Gioconda	Lawrence Livermore National Laboratory
	Mark Hughey	CH2M HILL Plateau Remediation
	David (DJ) Johnson	Honeywell Federal Solutions
	Linda E. Kobel	Los Alamos Technical Associates
	Greg Meyer	Fluor Federal Services
	Robert Miklos	Idaho National Laboratory
	Billy Morrison	Veolia
	Michelle Reichert	Consolidated Nuclear Security, LLC
	Jeffrey L. Stevens	BWXT Technical Services Group
	Mark Whitney	Amentum
	Karen Wiemelt	Jacobs Engineering Group
	Robert Wilkinson	Mission Support Alliance
Directors Emeritus	Lincoln E. Hall	L&L Associates, Inc.
	Donald W. Pearman	Bechtel National, Inc.

WORKING GROUPS

EFCOG continues to function under a streamlined organization of six working groups:



These Working Groups include subject matter experts, leaders, and managers from across DOE's programs, laboratories, and sites. This year the Working Groups produced focused best practices developed from across the enterprise, issued numerous white papers and recommendations, and

supported DOE in the review, updating, and improvement of a broad range of DOE Orders, standards, and guides. In all these efforts, we maintained a focus on achieving excellence in a manner that is practical, implementable, cost-effective, and sustainable. The key FY2020 accomplishments of these groups as well as a summary of the planned FY2021 activities are summarized below. More detailed description of both FY2020 and FY2021 activities, as well as membership of the groups, can be found on the EFCOG website.

During the past year, the EFCOG Working Groups focused on numerous critical initiatives. The Working Groups utilized teleconferences and meetings to exchange information and lessons learned. Each Working Group performs its activities consistent with a charter approved by the Board of Directors.

A Chairperson oversees the direction of each Working Group. Working Group membership includes individual subject matter experts supporting particular focus areas. The FY 2020 Working Group Chairs (and their member company affiliations) are shown below as of January 2020. DOE and NNSA Headquarters and Field Sponsors provide advice, information, and support.

2020 WORKING GROUP LEADERSHIP		
WORKING GROUP	**EFCOG CHAIR**	**DOE LIAISON and DOE & NNSA POCS**
Project Delivery	Amy Basche, Chair (MSA)	Paul Bosco, OAPM; Mark Arenaz, ID; Bob Raines, NNSA
		delete
Safeguards and Security	H. Ray Hubbs, Jr., Chair (Y-12)	Mark Hojnacke, AU
Safety	John McDonald, Chair (Washington River Protection Solutions)	Pat Worthington, AU; Brian DiNunno, EA; Jim Goss, (NA- NPO) NNSA; Mike Hicks, ID; John Marra, EM; Jose Munoz, NNSA; Bob Nelson, EM; Ashley Ruocco, AU; Rizwan Shah, AU; Josh Silverman, AU; Garrett Smith, AU; Kevin Dressen, EA-10; Jim Dillard, AU-11; Jeffery Williams; Robin Keeler, AU-11; Steve Singal, AU-11; Moriah Ferullo, AU-11; Rob Vrooman; Wes Mouser, NTC; Chris Chaves, AU; Christian Palay; Scott Whiteford; Cate Berard ; Colette Broussard; Julie Goeckner

Training	Shayne Eyre, Chair (Battelle Energy Alliance)	Karen Boardman, EA
Waste Management	Renee Echols, Chair (Firewater)	Mark Senderling, EM; Ahmad Al- Daouk, NNSA; Rob Boehlecke, NNSA; Ray Corey, RL; Kurt Gerdes, EM; Ben Harp, ORP; Chris Kemp, ORP; Julia Shenk, EM; Dave Michlewicz, SC; Rob Seifert, EM; Dan Sullivan, WV; Doug Tonkay, EM
Cybersecurity	Bridgitte Mase, Chair (BGS)	Jeanne Beard, DOE EM; Emery Csulak, DOE HQ; Fred West, DOE EA; Wayne Jones, NNSA

2020 ACCOMPLISHMENTS AND FY2021 PLANNED ACTIVITIES

PROJECT DELIVERY WORKING GROUP

The EFCOG Project Delivery Working Group (PDWG) charter is to leverage the expertise and experience of DOE contractors to address challenges and achieve improvements in project delivery across the DOE complex. The PDWG's purpose is to seek out, promote and share the best practices and processes for successful project delivery at DOE facilities. This is achieved through contractor subject matter experts and professionals from across the DOE complex working together, and in partnership with DOE, to implement DOE initiatives which strengthen and advance the development, management and delivery of projects (and project-like activities) in support of DOE missions. The PDWG portfolio includes broad-based, interrelated elements across the project lifecycle critical to successful project delivery. Areas of focus and collaboration include:

- Data Quality
- Project Management
- Cost Estimating
- Scheduling
- Risk Management
- Acquisition Management
- Contract Management
- Project Peer Review Support
- Start-up, Testing and Commissioning
- Guide revisions

The Working Group focuses on practical and effective solutions to complex-wide challenges; promoting open communication and sharing of lessons learned and best practices, and leverage of inter-site and inter-contractor solutions to achieve enterprise-wide improvement while supporting cost-effective and efficient solutions. This is achieved in a manner that maintains a priority on safety, compliance and cost-effectiveness.

The Project Management focus areas are, construction management, risk management, cost estimating, scheduling and project peer review support. The Project Controls Subgroup focus is primarily on earned value compliance in support of the DOE Office of Project Management (PM)-30 and EM-5.22. These efforts will be integrated and supported by task teams and other working groups

as necessary to provide solutions to improving project delivery across the complex. The work plan activities will be accomplished through the collaboration of complex-wide subject matter experts. All PDWG activities will emphasize data quality in all aspects, outcomes, and products.

FY2020 Accomplishments

- Provided collaborative earned value compliance support to the PM Oversight and Assessments (PM)/ (PM-30) and EM-5.22, as requested
- Provided ongoing support to PM-30 in development of an EVMS Maturity scorecard through the Arizona State University (ASU) Study
- Published monthly "Practitioner" Newsletter
- Co-Authored EFCOG/DOE-PM-30 "Practitioner" article on managing through the COVID-19 Pandemic
- Published Best Practice on "Application of Tools Based on EVMS Concepts for Projects under $50M"
- Issued White Paper documenting the different methodologies used to utilize risk triggers in schedules and the pros and cons associated with each method
- Issued White Paper/potentially a Best Practice on evaluating the projected effectiveness of a risk/opportunity handling strategy and the methodology to guide project team through the decision process to implement or not to implement

FY2021 Goals

- Assimilate salient COVID-19 Lessons Learned
- Ensuring Long-Term Availability of Critical Equipment, Supplies and Infrastructure
- Assuring that Projects are Completed on Cost and Schedule
- Continue to Emphasize Resource Loaded Integrated Master Schedules
- Continue to Demand Data Quality – Improve Data Creditability
- Continue to provide qualified resources to support PM-30 and EM-5.22 requests, as needed (Peer Reviews, EVMS Surveillance, Document Reviews)
- Continue to support the PM-30 ASU EVMS Maturity Study and Environmental Factor Implementation
- Support DOE efforts in the development of DOE guides and revisions. Provide review comments, support comment disposition/resolution, and implementation
- Issue a Bias Awareness Training Package which can be used throughout the complex as a "primer" to the types of bias that make our judgement less effective
- Issue a guide to specific bias reduction techniques that can be applied to improve judgement effectiveness through Program of process enhancements
- Pilot bias reduction techniques at selected sites

- Continue to work with the Acquisition and Contract Management Subgroup and DOE prior to and after the initial End State Contracting Model awards to develop and deploy methodologies for Management Reserve and risk transparency on Federal Acquisition Regulation-based contracts that can be utilized by both contractor and DOE during Indefinite Delivery/Indefinite Quantity (IDIQ) task negotiation, authorization and definitization
- Continue to identify best practices in partnering processes that support efficient contract administration
- Continue to conduct an industry information share on subcontract oversight and compliance and areas of high perceived risk; share strategies for mitigating or eliminating risk
- To the extent practicable and supported by contract awards, gather contractor industry input on the rollout of the ESCM Step 2
- Continue to identify practices in contract closeouts that may reduce the time, complexity, and cost of prime contract closeout

SAFEGUARDS AND SECURITY WORKING GROUP

The Safeguards and Security Working Group (SSWG) is chartered to continuously improve Safeguards and Security (SAS) performance across DOE by focusing on the protection of Nuclear Material and Special Nuclear Material (SNM), sensitive information, classified matter, assets, and personnel. The SSWG adds value by bringing together the best and brightest DOE and industry SAS professionals to analyze issues and develop cost-effective solutions that bring clarity and continuous improvement to the DOE missions.

The primary objectives are to 1) enable the successful execution of DOE missions and programs by promoting security practices that deliver cost effective, safe and secure outcomes; and 2) provide a forum for the active exchange of ideas, approaches and lessons learned among contractors and industry that enhances collaboration through the sharing of innovative technologies and methods and encourages interaction between DOE management and contractors on complex wide objectives, issues and projects.

The Working Group serves as a consensus board for emerging security directives proposed by DOE and for the interpretation and consistent application of existing DOE directives. The Working Group assures the goals of EFCOG and DOE are met through effective planning and execution and promotes continuous improvement and professional development by sharing information among contractors through vehicles such as websites, workshops, and subgroups.

FY2020 Accomplishments

In FY2020, the Working Group focused on key areas to address current or emerging challenges and to deliver efficiency and effectiveness in the development of SAS Programs. New chairs and co-chairs were appointed for the SSWG and subgroups. Each subgroup conducted multiple conference call meetings to move forward with identified initiatives.

Due to the COVID-19 pandemic, and related restrictions, the SSWG has faced the same challenges as many have encountered. All meetings have been via phone or other visual media means. Although the contacts have maintained, members have had to focus on their respective site recovery efforts, therefore limiting the time available to consistently accomplish the FY2020 goals. If nothing else, the SSWG has identified Best Practices that can be utilized during this continued situation or, in worst case, future situations like another pandemic. In FY2020, the SSWG addressed the following issues:

- Initiation of a Destruction of Media Best Practice
- Assist DOE in revision of Policy and Standard as well as assisting on the Operations Security (OPSEC) Hand Book
- Develop an Export Control Best Practice Guide to assist the sites in implementing current and new regulatory requirements
- Initiation of a Best Practices for Cyber/Physical Security Integration document
- Completion of Material Control & Accountability (MC&A) Subgroup's update to Termination of Safeguards Best Practice document, update Tamper-Indicating Devices seals guide and initiate development of an inventory best practice document
- Initiate work on Active Shooter Best Practice Guide

FY2021 Goals

- Information Security
- Develop Standard Technical Surveillance Counter-Measures Job Qualification Document
- Develop Standardized Facility Threat Assessment Process
- Continue work on and publish Destruction of Media Best Practice
- Develop presentation on Marking in the Electronic Environment
- Develop presentation on new Controlled Unclassified Information requirements
- MC&A
- Develop Measurement Equipment Matrix
- Develop MC&A Performance Assurance Best Practices Guide
- Continue work on and develop an Inventory Best Practice Document
- Develop Authorization to Ship Template
- Develop MC&A Accounting Brochure
- Develop Physical Inventory Brochure
- Develop Catalog Barcode Readers Matrix

- Physical Protection
- Develop Civil Disobedience Best Practices Guide
- Continue work on and Develop Active Shooter Best Practices Guide
- Program Planning and Management
- Establish Advisory Panel Team / Working Group for Local Insider Threat Working Group (LITWG)
- Develop Best Practices Guide on establishing the LITWG core members
- SSWG Joint Sub-Group Activities
- Update member database and subject matter expertise contact list
- Conduct Annual SSWG Meeting
- Update and maintain website as information tool
- Conduct midyear video teleconference or meeting to update task status
- Develop lessons learned and best practices from operations during COVID document(s)

WASTE MANAGEMENT WORKING GROUP

The Waste Management Working Group (WMWG) is chartered to leverage the expertise and experience of contractors to the DOE. The purpose of the WMWG is to seek out and promote the best management and operating practices, cost effective technologies and disposal options for all waste streams generated at DOE facilities whether destined for DOE or commercial facilities.

The WMWG will be focused on complex wide integration and technology transfer while supporting cost effective and efficient waste options. This will be achieved in a way that enhances complex wide communication and maintains a priority on safety, environmental stewardship and security. The scope of the working group includes cradle to grave waste management considerations including waste generation, especially from all DOE activities including facility deactivation & decommissioning (D&D) programs.

The WMWG will also continue to provide DOE with technical support concerning Waste Classification issues across the Complex. The WMWG membership has the technical expertise to provide recommendations on waste classification to the lowest disposition level that is acceptable for compliance with DOE Order 435.1 and other applicable regulation. Identifying alternative disposition pathways for the safe and cost-effective management of lower activity radioactive wastes that have historically been managed as High-Level Waste (HLW) or Transuranic (TRU) supports DOE's risk-based waste management strategy.

FY2020 Accomplishments

- Establishment of a Challenging Waste Subgroup that resulted from EM's Top to Bottom Waste Management Program review. This subgroup's mission is to collect challenging waste inventory information from DOE waste generators around the complex, provide a

collaborative forum to discuss the most effective means to disposition these waste streams, and identify new pathways or technologies that could be applied to resolve waste challenges. In FY2020, the subgroup completed its first task of generating a consolidated list of challenging wastes throughout the DOE Complex. The data was pulled from the EM's waste database (i.e., BLDD), Annual TRU Waste Generators Report, Site Treatment Plans, and site knowledge from Waste Management leads. From this report, the Subgroup selected its first challenging waste stream to focus on - reactive sodium metal

- In response to a request by EM and its Field Offices, a task team performed an analysis of onsite versus offsite disposal costs for low-level radioactive waste streams. The Task Team provided DOE EM with a final analysis of disposition cost comparisons and provided recommendations to EM for appropriate inputs, risk considerations, etc. This information was also utilized, in part, for EM's response to a request by Congress for similar information
- Building upon the best practices identified in EA-31's "Enterprise-wide Assessment of the Department of Energy's Packaging and Shipping of Radioactive Waste" (Final Report issued July 2020), the WMWG obtained further detail and issued two best practices that can be utilized by our membership for improve waste operations (i.e., waste characterization, packaging, and transportation)
- The National Laboratory Subgroup, now integrated into the Challenging Waste Subgroup, established a Technical Standard for characterization of dry active low-level radioactive wastes (LLW). These methodologies can now be implemented through issuance of a DOE Technical Guide for characterization of surface contaminated LLW and may provide sites with standards and best practices for waste characterization. This may be most helpful for smaller generators.

FY2021 Goals

- Provide technical support on Waste Classification issues
- Provide support to the EM radioactive waste program including technical support for waste management corporate board or user groups (e.g., LLW Federal Review Group [LFRG], TRU Waste and Tank Waste Corporate Boards)
- Provide technical support to the DOE Order 435.1 implementation and training
- Provide support to the DOE packaging and transportation system
- Utilize Challenging Waste Subgroup forum to focus on reactive sodium metal disposition options and pathways
- Focus collaboration between D&D planning and waste generation, treatment, and disposal for upcoming clean-up of the Oak Ridge Reservation (e.g., Y-12 mercury and beryllium waste challenges and the Oak Ridge National Laboratory high activity wastes)
- Stand up a TRU Waste Subgroup to support EM and NNSA TRU waste generators

TRAINING WORKING GROUP

The Training Working Group (TWG) was established to drive efficiency and effectiveness in training conducted for the DOE. The TWG takes a leadership role in leveraging collaborative initiatives that support training. It also assists in identifying areas of improvement around proposed policy or regulatory changes, new or changed processes, and subject matter expertise for training initiatives across the complex.

FY2020 Accomplishments

In December 2019, the TWG held another highly successful annual workshop. With over 60 attendees and a variety of presentations and workshops over the course of three days, incredible collaboration was realized, and networks further established. A new location, the Nevada National Security Site, provided many an opportunity to understand another part of the DOE complex and benchmark best practices.

The pandemic this year threw a wrench into the planned work of the TWG, but it also forced us to consider and address moving much of the DOE complex learning into modern technology platforms and methods. The group spent extensive time working to identify issues, collaborating on best approaches, and educating members.

The TWG made use of several venues to provide the collaborative framework. These included monthly calls, special sessions, and a series of four lessons learned presentations and discussions forums in August and September. DOE site training organizations nationwide mobilized with vigor to address the sudden challenges. Adjusting the way we do business, to be more effective in a dynamic and changing environment required encouragement, collaboration, sharing of training innovations, and benchmarking with organizations outside the DOE complex. Specific aspects addressed included:

- Training organizations experienced a significant increase in work due to functional departments needing to shift their training into the online experience. The increased attention also caused expectations to rise. Web development expertise, capacity, and efficiency needed to be rapidly developed, courses converted into viable learning methodologies for the new modalities, instructors educated in the use of web-enabled training solutions, new roles introduced to manage the technical aspect, and subject matter experts brought up to speed in the new processes and delivery mechanisms. Decisions were made on the balance between in-person and virtual class elements and best practices for this blended learning model.
- In-class teaching was dramatically impacted due to new safety protocols, including social distancing, appropriate personal protective equipment, and cleaning/sanitizing spaces and props. To enable these, class logistics such as classroom layout, class sizes, and personnel

mix from different facilities were adjusted. To be more effective with student time, in-class learning was focused on high-value activities such as hands-on practice and practicals.

- DOE's memo on regulatory relief for 180 days for specific topical areas was welcomed by the contractor community, though different sites chose to interpret it differently. Consequently, its ability to provide relief was varied from none to extensive.
- Many managers complex-wide were suddenly faced with workers unable to perform onsite work. To take advantage of worker time and maintain site productivity, training organizations scrambled to make courses available. The TWG worked with sites and the National Training Center (NTC) to make standard courses available to all sites, leveraging the NTC's online learning platform. Other organizations learning was also collected and made available for managers to use. Sites also made use of worker expertise in course development and review.

Aside from the pandemic response, the TWG made progress with DOE on the advancement of the revised DOE Order 426.2. We also have begun work in earnest on the revision of DOE-STD-1070-94 with *an* emphasis on updating and bringing in outcomes-based criteria.

FY2021 Goals

- Continue to provide technical expertise in promoting efforts to realize efficiencies in course creation and delivery. Specifically, we are looking at developing better processes to promote shared course delivery.
- Continue to provide leadership in regulatory reform initiatives, including aiding in the revision to DOE O 426.2 and revising training standards and guides.
- Build tools and processes to enable better collaboration in course development, conduct of assessments, and best practice sharing. We are also looking at further leveraging our annual workshop to reach more DOE training personnel.

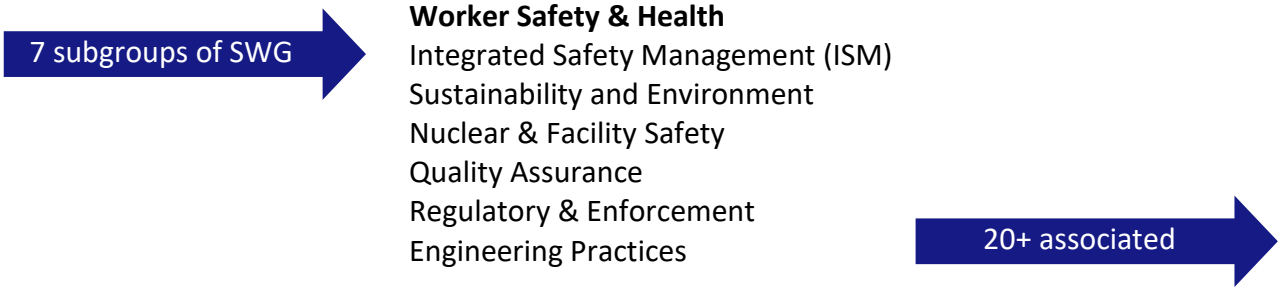
SAFETY WORKING GROUP

The EFCOG Safety Working Group (SWG) helps member companies attain and maintain the highest levels of Integrated Safety Management (ISM) performance in the operation of DOE/NNSA facilities and projects. "Safety," as it relates to the scope of the working group, includes a number of related functions such as nuclear and facility safety, engineering processes, radiological protection, criticality safety, fire protection, worker safety and health, industrial hygiene, environmental protection, quality assurance, contractor assurance system (CAS), and related regulatory programs.

The SWG achieves this purpose by:

1. Advocating strong, effective implementation of ISM
2. Seeking out, developing, promulgating, and promoting best practices

3. Facilitating the exchange of operating experiences and information
4. Developing position and technical papers to support enhancement of DOE/NNSA regulations, directives, and processes, where appropriate
5. Providing DOE/NNSA and member companies access to networks of subject matter experts
6. Identifying opportunities to save and/or avoid costs in the implementation of safety and regulatory programs
7. Helping member companies implement effective programs through peer reviews and consultations, and
8. Facilitating training and collaboration workshops to enhance the competency of the professionals under the SWG umbrella.



Accomplishments for FY2020

- Occupational Medicine Task Team benchmarked 32 clinical topics related to COVID-19 and increased virtual meetings to twice a month due to the need for frequent discussions and medical consultations related to COVID-19.
- Conducted complex-wide Laser Worker Survey
- Participated as Subject Matter Experts in the DOE National Training Center's development and pilot of SBA-240, Technical Safety Requirements Review
- Supported the revision of DOE-HDBK-1163, "Integration of Hazard Analysis"
- Developed model for using a CAS to identify DOE complex-wide issues
- Best Practice/Regulatory Summary for 10 CFR 835, Occupational Radiation Protection
- Best Practice on Adoption of the 2020 NFPA 70 (National Electrical Code)
- Three Lessons Learned on COVID-19 radiological response
- Best Practice on managing the Code of Record
- Best Practice on Conduct of Engineering Training
- White Paper on "Utilizing Technology to Reduce Human Error"
- COVID-19-focused Lessons Learned on relieving stress/anxiety in the workplace to reduce errors by employing Human Performance Improvement/physiological principles
- Guidance for DOE/Corporate Reviews of Contractor Assurance Systems
- Shared Best Practices for optimizing efficiency, safety and performance of laboratories through a Smart Labs for National Labs Workshop

- Supported the DOE Safety Culture Improvement Panel Annual Meeting

In total, 17 Best Practices and four Lessons Learned were developed and issued because of SWG efforts during FY2020. These Best Practices and Lessons Learned can be located on the EFCOG website.

FY2021 Goals

The SWG FY2021 Annual Work Plan, located on the EFCOG website, contains the full list of current initiatives. Below is a summary of the key goals to be addressed within the SWG Annual Work Plan.

- Review and update Work Planning & Control work document guidance.
- Create a single list of approved Nuclear Quality Assurance (NQA)-1/Commercial Grade suppliers for DOE-EM facilities.
- Evaluate methods for performing issue investigations using Human Performance Improvement principles.
- Develop a Best Practice on criticality safety calculations using Monte Carlo codes.
- Develop a Best Practice to provide guidance for the effective integration of the Enforcement Program and the Classified Information Security programs.
- Pilot the use of the Federal Energy Management Program Technical Resilience Navigator.
- Develop a DOE Laser Near Miss & Accidents Database.
- Develop guidelines for management and control of cloud-hosted software
- Develop a set of effective Quality Assurance metrics and methods
- Build consistent radiological worker training for the Complex.
- Develop best practices for improved Industrial Hygiene/Occupational Medicine coordination.

CYBERSECURITY WORKING GROUP

The Energy Facility Contractors Group (EFCOG) Cybersecurity Working Group (CSWG) is chartered to assist member companies attain and maintain excellence in all aspects of Cybersecurity operations and management of DOE facilities through the consistent exchange of information, best practices, and corresponding improvement activities. The CSWG will achieve this by:

- Leveraging the expertise and experience of DOE Contractors to address challenges and achieve improvements in cybersecurity;
- Advocating for strong, effective implementation of Integrated Cybersecurity Management across departmental activities;
- Developing, and promoting best management and operating practices;
- Improving the effectiveness of boundary authorization packages for achieving and maintaining the Authority to Operate (ATO) and achievement of Cybersecurity readiness

processes across contracts by working together, exchanging information, and sharing best practices and lessons learned;

- Improving the effectiveness of risk management and cyber resilience, and associated processes by developing tools, practices, guidance, and recommendations for compliance and directive changes – where appropriate and as supported by Contractor and DOE line management;
- Providing real-time support for cyber related emergent issues in the form of ideas, tools, resources, etc.;
- Interfacing with various intelligence associated organizations and industry providers to promote cooperation, information exchange, and as appropriate, minimization of duplication of effort;
- Interfacing with key DOE managers (both headquarters and field) on varying concepts, practices, and concerns associated with Cybersecurity needs and processes to enable better understanding of customer needs and concerns;
- Interfacing with other external organizations on varying concepts, practices, and concerns associated with Cybersecurity processes and risk management;
- Promoting transparent communications across group members and DOE;
- Facilitating the exchange of operating experiences and information on Cybersecurity programs and their effectiveness, and designing studies and developing position and technical papers to inform DOE where appropriate;
- Providing DOE and member companies with access to a network of subject matter experts;
- Identifying opportunities to save and/or avoid costs in the implementation of Cybersecurity and regulatory programs while assisting member companies implement effective Cybersecurity and regulatory programs through peer reviews and consultations; and
- Arranging training and awareness workshops to enhance the competency of Cybersecurity professionals and collaborative workshops.

The working group is focused around the following key areas of Cybersecurity: Industrial Control Systems/Distributed Control Systems/Supervisory Control and Data Acquisition; Internet of Things & Smart Technologies; Risk Management & Governance; Addressing Remote Work Challenges; Technology and Tools; and Cloud Security.

FY2020 Accomplishments

- Established the Cybersecurity Working Group
- Obtained stakeholder support across multiple DOE program offices
- Established multiple cybersecurity best practices associated with remote work
- Created a secure platform in a FedRAMP tenant of Azure Government for conducting a collaborative workshop and an online discussion forum

- Initiated awareness activities for key topics such as the Cybersecurity Maturity Model Certification (CMMC) requirements; National Institute for Standards and Technology (NIST) 800-53 revision 4 to revision 5; Industrial Control System Awareness; New Technologies in Industrial Control System Security; Cloud Security Best Practices; and Cyber Resilience Best Practices
- Arranged and scheduled key speakers for a CSWG Workshop to be held in October 2020 during Cybersecurity Awareness Month
- Reviewed abstracts for key topics for a CSWG Workshop to be held in October 2020

FY2021 Goals

- Establish subgroups for key topic areas
- Conduct the CSWG Workshop for October 2020 in alignment with Cybersecurity Awareness Month
- Facilitate participation across DOE and the EFCOG contractor community
- Continue collaboration in the CSWG discussion forum to facilitate key topic discussions, generate best practices, and share information
- Turn the collaboration from the CSWG Workshop into best practices and additional action items to further the cybersecurity capabilities across sites
- Conduct lessons learned from CSWG Workshop to use for improving the platform and effectiveness for the October 2021 event
- Plan the October 2021 event with speakers and topic areas
- Create and make available vendor neutral white papers on key topic areas
- Create and make available best practice guides for key topics such as:
    - NIST 800-53 rev 4 to rev 5 security plan conversions
    - NIST 800-53 rev 4, rev 5, and Cybersecurity Framework (CSF) mapping guide
    - NIST 800-53 rev 5 with NIST 800-82 overlay security plan template
    - Cyber resilience in a remote environment
    - Cyber resilience practices - top 10+
    - Cloud Security practices – top 10+
    - Understanding, categorizing, and protecting High Value Assets
    - Industrial Controls Security top 10+
    - Smart technologies security top 10+
    - Tool considerations/comparisons for Identify, Protect, Detect, Respond, and Recover capabilities

WORKING GROUP INFORMATION

Please see the links below for detailed FY2021 plans, deliverables, Best Practices, Lessons Learned and other relevant document for each of the Working Groups.

Safety WG: https://efcog.org/safety/?drawer=Safety%20Working%20Group*Documents

Project Delivery WG: https://efcog.org/project-delivery/

Training WG: https://efcog.org/training/

Safeguards & Security WG: https://efcog.org/safeguards-security/

Waste Management WG: https://efcog.org/waste-management/

Cybersecurity WG: https://efcog.org/cybersecurity-working-group/

EFCOG FISCAL YEAR 2020 FUND ACCOUNT SUMMARY

October 1, 2019 – September 30, 2020

Beginning Balance as of 10-01-19		**$ 531,490.08**
Receipts		
FY-2019 Memberships & Renewals	$ 6,000.00	
FY-2020 Memberships & Renewals	$ 263,857.14	
FY-2021 Memberships & Renewals	$ 134,000.00	
Interest	$ 2,868.33	
Total Receipts	**$ 406,725.47**	
Disbursements		
Support Service Contractor		
Longenecker & Associates, Inc.	$358,838.93	
Total Disbursements	**$358,838.93**	
Net income as of 09-30-20	$47,886.54	
Ending Balance/Management Reserve as of 09-30-20		**$579,376.62**

RENEWED MEMBERSHIP FOR FY2020

*Accelerant Solutions	GEM Technologies Inc.	NAC International
Advanced Technologies and Laboratories Int'l	GEM Technology International Corporation	Navarro Research and Engineering
Alliance for Sustainable Energy, LLC (NREL)	General Dynamics Information Technology	Neptune and Company, Inc.
Amentum	Government Scientific Source, Inc.	North Wind Group
American DND, Inc.	HBE Consulting Solutions, LLC	Nuclear Waste Partnership LLC
Argonne National Laboratory	HealthWorks Medical, LLC	Oak Ridge Associated Universities
Atkins	HGL	Orano Federal Services LLC
AVANTech Inc.	Honeywell	Pacific Northwest National Laboratory
AzTech International, Inc.	Honeywell Federal Solutions	PAE Inc.
Babcock Services, Inc	HPM Corporation	Parsons Government Services
Bechtel National, Inc.	HukariAscendent	Parvati Consulting LLC
Bechtel Waste Treatment Plant	Humphreys & Associates, Inc.	Perma-Fix Environmental Services
Booz Allen Hamilton	Huntington Ingalls Industries	Project Enhancement Corporation
Boston Government Services, LLC	I.C.E. Service Group, Inc.	Samos Advisors LLC
Brookhaven National Laboratory	Idaho National Laboratory	Sandia National Laboratory
BWXT Technical Services Group, Inc.	Innovative Technology Partnerships, LLC	Sargent & Lundy
Caliburn	INTERA Incorporated	Savannah River Nuclear Solutions
*CDM Smith	*J. G. Management Systems, Inc.	Savannah River Remediation LLC
Centerra Group, LLC	Jacobs Engineering Group	Schneider Electric
CH2M HILL BWXT West Valley	Juno Management Professionals	Skookum Contract Services
CH2MHILL Plateau Remediation Company	Kiewit Power Constructors	SLAC National Accelerator Laboratory
ClearPlan LLC	L&L Associates, Inc.	SOC LLC
*Cogent Security Consulting LLC	Lawrence Berkeley National Laboratory	Spectra Tech, Inc.
Consolidated Nuclear Security	Lawrence Livermore National Laboratory	Strata-G, LLC
Curtiss-Wright Nuclear	Leidos	Strategic Management Solutions, LLC
DevonWay, Inc.	Lemma Technical Services	Studsvik, Inc.
DLE Technical Services, LLC	Los Alamos National Laboratory/Triad	Swift & Staley
elecTrain	Los Alamos Technical Associates, Inc.	TerranearPMC, LLC
Federal Engineers & Constructors	Management Solutions, LLC	UCOR
Fermi National Accelerator Laboratory	MarCom LLC	University of California
Fire & Pump Service Group	Merrick & Co.	UT-Battelle
Firewater Associates LLC	Mirion Technologies Inc.	Veolia Nuclear Solutions
Flour Idaho	Mission Support Alliance, LLC	Washington River Protection Solutions
Fluor Federal Services	Mission Support and Test Services	Waste Control Specialists LLC
Fluor-BWXT Portsmouth LLC	MPR Associates, Inc.	Westinghouse Government Services
Four Rivers Nuclear Partnership	N3B	

*New EFCOG Member Companies

EFCOG MEMBER COMPANIES

By the end of FY 2020, EFCOG membership included 108 DOE contractors. EFCOG welcomes the following new companies:

Accelerant Solutions
CDM Smith
Cogent Security Consulting
J.G. Management Solutions