



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



Energy Facility Contractors Group

Annual Report 2018

# FISCAL YEAR 2018 ANNUAL REPORT TO THE MEMBERS

## 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



For over 25 years, the Energy Facility Contractors Group (EFCOG) has worked to improve operations across the Department of Energy (DOE) complex. 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 strives to improve the efficiencies and safety of the DOE/NNSA operations.

We focus on providing 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 are conducted by the EFCOG Working Groups. EFCOG also promotes the sharing of lessons learned and best practices provided on our website.

EFCOG continues to operate utilizing five specific working groups:

**Project Delivery  
Training**

**Safeguards and Security  
Waste Management**

**Safety**

Below this working group organization, various subgroups and task teams work on specific functional areas and special issues/tasks. The working groups represent the best and the brightest of the subject matter experts throughout the DOE programs, laboratories and sites. We support DOE by providing numerous ideas and opportunities thru white papers, and give recommendations and comments on a range of DOE Orders, standards, and guides. In developing best practices, we identify those areas where work can be done more efficiently and in a safe manner.

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 sponsor, co-sponsor and/or organize opportunities such as the National Cleanup Workshop for technical exchanges between the contractor community and the Federal government.

This report summarizes the accomplishments of the working groups over the past Fiscal Year 2018 and lays out initiatives and deliverables for the upcoming Fiscal Year 2019. 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 and look forward to the 2019 tasks that they will achieve to continue to improve the operations of the DOE/NNSA facilities. Thank you all and we look forward to another productive year together.

Sincerely,  
William A. Morrison  
Chair, Energy Facility Contractors Group

Twenty-six years ago, EFCOG was formed. The 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.

Over those 26 years, we have continued to demonstrate the value of contractors across the DOE complex working together and in coordination with DOE/NNSA at the HQ and the field level. Fiscal year 2018 was no exception. We focused on ensuring that we provide constructive and objective results for DOE across the DOE complex, sustain a strong network of subject matter experts (SMEs), and promote open and effective inter-site sharing of lessons learned and best practices.

## 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-Environmental Management Field Office Managers, including participation in bi-weekly field managers calls, 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 establish a new Corporate Partnering group focused on NNSA and made up of corporate executives from all NNSA prime contractors, which is modeled after the successful EM Corporate Partnering group. We utilized the Corporate Partnering groups to move forward several important issues, including reducing operational costs at DOE sites and streamlining cost proposals for future procurements. We continued our cooperation with sister organizations, including DOE’s Field Management Council, the National Laboratory Directors Council COO group, the Institute of Nuclear Power Operators, ECA, and the Nuclear Energy Institute.

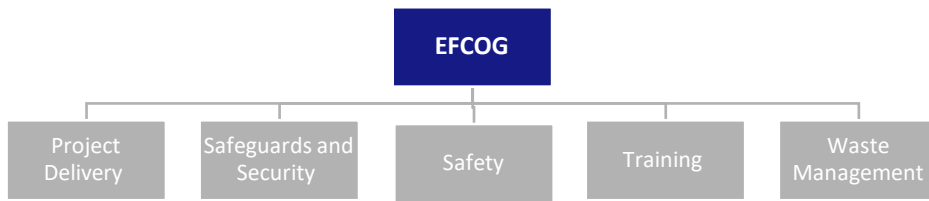
In September, we co-sponsored, with ECA and DOE-EM, the fourth National Cleanup Workshop. The workshop focused on upcoming challenges and provided the opportunity for deeper interactions and dialogue with leaders from the communities that host DOE sites. We improved the partnership between the EFCOG Board of Directors and DOE-EM leadership to enable more constructive dialogue on how best to address topics such as practical ways to reduce costs at DOE sites, how to realistically achieve DOE’s acquisition objectives, and resolving a range of issues affecting productivity and cost effectiveness.

# Board of Directors

Chair	William A. Morrison	Veolia Nuclear Solutions
Vice-Chair	Michael J. Graham	Bechtel National, Inc.
Vice-Chair Elect	Sandra Fairchild	Savannah River Remediation LLC
Directors	Kelly Beierschmitt	Los Alamos National Laboratory
	Valerie McCain	Bechtel Waste Treatment Plant
	John Clymo	Sandia National Laboratories
	Robert Miklos	Idaho National Laboratory
	Moses N. Jaraysi	CH2M HILL Plateau Remediation Company
	Linda E. Kobel	Los Alamos Technical Associates, Inc.
	Michael K. Lempke	Huntington Ingalls Industries
	Greg Meyer	Fluor Federal Services
	Liz Porter	Leidos
	Frank R. Sheppard, Jr.	Parsons Government Services
	Jeffrey L. Stevens	BWXT Technical Services Group, Inc.
	Morgan Smith	Consolidated Nuclear Security, LLC
	Mark Whitney	Washington River Protection Solutions
Karen Wiemelt	Jacobs Engineering Group	
Directors Emeritus	Lincoln E. Hall	L&L Associates, Inc.
	Donald W. Pearman	Bechtel NSE

Fiscal Year 2018 Board of Directors

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



These Working Groups include SMEs, 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 FY2018 accomplishments of these groups as well as a summary of the planned FY2019 activities are summarized below. More detailed description of both FY2018 and FY2019 activities, as well as membership of the groups, can be found on the EFCOG website.

## WORKING GROUPS

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 SMEs supporting particular focus areas. The FY 2018 Working Group Chairs (and their member company affiliations) are shown on page 7 as of November 2018. DOE and NNSA Headquarters and Field Sponsors provide advice, information, and support.

WORKING GROUP	EFCOG CHAIR	DOE LIAISON and DOE & NNSA POCS
<b>Project Delivery</b>	<b>Amy Basche, Chair</b> (MSA)	<b>Paul Bosco, EM</b> ; Mark Arenaz, ID; Bob Raines, NNSA
<b>Safeguards and Security</b>	<b>Michael Schwartz, Chair</b> (Pacific Northwest National Laboratory)	<b>Marc Brooks, AU</b>
<b>Safety</b>	<b>John McDonald, Chair</b> (Washington River Protection Solutions)	<b>Pat Worthington, AU</b> ; Amanda Anderson, EM; Mark Blackburn, AU; Jim Dillard, AU; Brian DiNunno, EA; Jim Goss, (NA-NPO)NNSA; Pranab Guha, AU; Mike Hicks, ID; Greg Jones, RL; John Marra, EM; Jose Munoz, NNSA; Bob Nelson, EM; Jim O'Brien, AU; Jim O'Neal, NNSA; Ashley Ruocco, AU; Rizwan Shah, AU; Josh Silverman, AU; Steve Singal, AU; Garrett Smith, AU
<b>Training</b>	<b>Shayne Eyre, Chair</b> (Washington River Protection Solutions)	<b>Karen Boardman, EA</b>
<b>Waste Management</b>	<b>W.T. (Sonny) Goldston, Chair</b> (Jacobs)	<b>Mark Senderling, EM</b> ; Vince Adams, EM-PPPO; Ahmad Al-Daouk, NNSA; Rob Boehlecke, NNSA; Ray Corey, RL; Kurt Gerdes, EM; Ben Harp, ORP; Ashok Kapoor, EM; Chris Kemp, ORP; Joanne Lorence, EM: Tom Longo, NNSA; Dave Michlewicz, SC; Ken Picha, EM; Geary Pyles, NNSA; Rob Seifert, EM; Terry Spears, SR; Dan Sullivan, WV; Linda Suttora, EM; Andy Szilagyi, EM; Doug Tonkay, EM

2018 Working Group Leadership

# FY18 ACCOMPLISHMENTS AND FY19 PLANNED ACTIVITIES

## Project Delivery Working Group

The EFCOG Project Delivery Working Group (PDWG) is chartered to leverage the expertise and experience of U.S. 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 will be 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 those broad-based, interrelated elements across the project lifecycle critical to successful project delivery. Areas of focus and collaboration include:

- Earned Value Management
- Cost Estimating
- Guide Revisions
- Project Management
- Acquisition Management
- Risk Management
- Project Peer Review Support
- Scheduling
- Contract Management
- Start-up, Testing and Commissioning

The PDWG is comprised of a Steering Committee and three technical subgroups, which include Project Controls, Project Management (PM), and Acquisitions.

### Accomplishments in FY2018

Reestablished PM-30 expectations of a compliant contractor integrated master schedule through presentation of "Developing and Effective Integrated Master Schedule" at the PM workshop *Note: received personal invitation from P. Bosco to present again at the 2019 PM Workshop*. Continued to provide qualified resources for PM-30 reviews as requested. Established an implementation approach for the "Program Management Improvement Accountability Act." Delivered Rev 0 of the Start Up, Testing and Commissioning guide based on collaborative efforts of the FY17 team. Provided Project Peer Review support. Prepared and peer reviewed an approach to eliminate schedule bias. Performed a compliance analysis of multiple approaches to Title III (construction) Pros/Cons in support of LANS. Collaborated with PM-30 to develop a compliant approach to model schedule of value payments in the integrated master schedule.

Performed an initial draft document review and comment of the PM-30 Planning and Scheduling Amplification Guide. Attended the May 2018 National Defense Industrial Association (NDIA) Integrated Project Management Division (IPMD) Meeting and provided support to the NDIA IPMD Surveillance Guide Working Group. Provided comment to the NDIA Planning and Scheduling Excellence Guide (PASEG) Version 4.0. Attended a joint EFCOG/PM-30 working session in November FY2018. Provided Regulatory Reform Initiative deliverables to DOE-HQ with recommendations for change in Contract Policy and Terms and Conditions. Developed best practices for managing schedule margin, startup, testing and commissioning, funding and spend profiles, use of carry-over, aligning funding to risk events on the schedule, and earned value management.



## Initiatives in FY2019

Continue to support PM-30 Certification Reviews and Surveillances with qualified resources. Issue best practice(s) based on the development of the Rev 0 Startup, Testing and Commissioning Handbook and support development of a DOE guide. Continue to support updates to NDIA PASEG and Government Accountability Office (GAO) Schedule Assessment Guide. Publish Earned Value Management Self-Governance Surveillance Best Practice. Develop and issue the Acquisition Subgroup charter. Identify Best Practices and Lessons Learned in managing the project or contract Code of Record. Provide support to PM-30's 3-year Earned Value Management System Maturity Model/Compliance Rating Index Concept/Study. "Ensure ongoing excellence in our workforce through succession planning and retention of institutional knowledge and critical skill sets." - Anne White

## EFCOG 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.

### 4 Technical subgroups of SSWG

Information Security

Material Control and  
Accountability (MC&A)

Physical Security and  
Protective Force

Program Planning and  
Management (PPM)

## Accomplishments in FY2018

In FY2018, 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. It was identified that there is a need to break out Program Planning and Management (PPM) in FY19 as its own subgroup to enable

attention to be provided on this topical area. Additionally, new chairs and co-chairs were appointed for the subgroups. Each subgroup conducted multiple conference call meetings to move forward with identified initiatives. The Working Group brought together Incidents of Security Concern (IOSC) subject matter experts (SMEs) from across the Enterprise to review current IOSC Programs. Weekly conference calls were initiated and allowed IOSC Plans to be collected from each of the 11 participating sites. A face-to-face meeting of all IOSC best practice document development team members was held.

The group also focused on developing potential consistent IOSC Program Plans from across the DOE Complex which included 1) positive examples of work processes, procedures, good ideas, or effective solutions; and 2) consistent IOSC Plans, categorization, terminology, interviewing, reporting, and training. The IOSC Best Practice Document was drafted and is being refined in FY19 to incorporate additional focus on categorization processes and practices. The Physical Security subgroup conducted conference calls and held a face-to-face meeting during the annual EFCOG meeting. Attention was focused on the review and implementation of the Design Basis Threat Policy and associated Security Risk Management Technical Standard. The MC&A subgroup conducted multiple conference calls and held meetings with multiple sub-group activities. Cross-site collaboration has increased through the MC&A sub-topical working groups (Physical Inventory, Measurements, Measurement Control & Statistics, and Accounting.) A Sandia Laboratory hosted SharePoint site has been an invaluable collaboration hub that has benefitted all members. The main focus was to assist in policy review and implementation of programs related to budgets and staffing for MC&A programs, in consideration of enhanced safeguards controls.

## Initiatives in FY2019

Initiatives in FY2019 include the incorporation of an IOSC Categorization Best Practice portion to the IOSC Best Practice Document. The objective is to potentially help the department to draft a revised Policy and Standard and partner with Office of Enforcement in building a consistent and usable document for use throughout the enterprise. The Working Group will also assist in the review and development of an OPSEC Handbook.

The Program Planning and Management subgroup will focus on the development of an Export Control Best Practice Guide to assist the sites in implementing current and new regulatory requirements.

The Physical Security subgroup plans to assist in collaboration and development of a best practices for Cyber/Physical security integration document. The MC&A subgroup plans to update termination of safeguards best practice document, update TID seals guide, and develop an inventory best practice document.

## 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.



#### 4 Technical subgroups of WMWG

- Decontamination and Decommissioning
- National Laboratory
- Packaging and Transportation
- Tank/High Level Waste

### Accomplishments in FY2018

This Working Group initiated, drafted and supported DOE's development of important Regulatory Reform initiatives in the areas of the interpretation of the definition of High Level Radioactive Waste (HLW) and the revision of DOE Order 435.1 "Radioactive Waste Management." The Definition of HLW was published by DOE in the Federal Register for Public Comment on October 10, 2018 and the EFCOG provided comments to DOE in support of this significant Regulatory Reform proposal on October 29, 2018. The comments were technical in nature and included the following summary:

- The Energy Facility Contractors Group (EFCOG) fully supports the U.S. Department of Energy's (DOE) interpretation of the definition of "high-level radioactive waste."
- The interpretation of a waste form based on its risk-significance to the public and environment is a more robust technical interpretation than the existing source-based approach.
- The risk-based approach allows waste to be dispositioned based on science and risk to human health and the environment rather than a source-based approach that does neither and simply relies on its origin for determining treatment and disposal options.
- If a waste form (including tank waste that is currently stored as a liquid in large underground tanks) is determined to meet Low Level Waste (LLW) disposal criteria and limits, then the waste should be classified and managed as LLW. Tanks could and should be closed based on the performance assessment that demonstrates that the Performance Objectives are met due to the characterization of the waste, not its source.
- Further, the waste not in tanks or removed from tanks should be disposed of in a LLW disposal facility licensed or authorized for that purpose by Nuclear Regulatory Commission (NRC), DOE or an NRC Agreement state.

Additionally, the Working Group provided technical support and regulatory expertise associated with Regulatory Reform and implementation in DOE Order 435.1 concerning waste classification and consolidation issues. Continued support to the Low-Level Waste Federal Review Group (LFRG), the Transuranic Waste Corporate Board, and the Tank Waste Corporate Board, was provided as well with specific support to the Office of River Protection (Hanford) for the Waste Incidental to Reprocessing Evaluations. Specific assistance to the DOE LFRG review teams were provided for the following LLW Disposal Facilities: The Hanford Integrated Disposal Facility, Oak Ridge EMWMF Cell 6, Oak Ridge new EMDF LLW Disposal Facility, The Portsmouth Onsite Disposal Facility, and the Idaho Remote Handled LLW Disposal Facility Performance Assessment and related document reviews.

DOE requested the Working Group to develop a complex wide assessment of the problematic radioactive wastes that exists at all the DOE sites. The assistance of the WMWG in collecting this information was needed to support DOE's comprehensive LLW and Mixed Low-Level Waste (MLLW) programmatic review. Performing the programmatic review allows for an analysis on the status of these programs and identified site concerns and opportunities for integration of creative solutions. The report of the EFCOG work to study the MLLW and LLW challenges in the DOE Complex for EM was transmitted to DOE on September 4, 2018.

The WMWG worked to assist DOE in preparation of a formal Assist and Assessment Program. The Working Group participated in the DOE-EM Assist Visit to Waste Isolation Pilot Plant August 13-17, 2018. The Assist Report was signed by EM on September 5, 2018.

The Working Group continued to provide Training in DOE Order 435.1 "Radioactive Waste Management" at Hanford and Idaho (INL).

Best Practice 198 Stakeholder Engaged Structured Decision Making is posted on the EFCOG website to facilitate early and timely collaboration among National Laboratories for managing challenging new waste streams. It has been developed and published as a process for sustainable structured decision analysis.

EFCOG Packaging & Transportation (P&T) Subgroup's report of radioactive shipments occurrence reporting lessons learned was transmitted to DOE on February 15, 2018. The purpose of the EFCOG P&T effort, as requested by DOE's EM Office of Packaging and Transportation was to determine the extent to which mechanisms such as, the DOE Occurrence Reporting and Processing System, Office of Environmental, Health, Safety and Security Operating Experience Lessons Learned and the Operating Experience (OPEX Share) data bases, can be utilized to compile information associated with significant P&T events throughout the DOE complex. Additionally, the objective of this report is to analyze the data and disseminate this information to DOE Transportation and Packaging Organizations Complex-wide with the goal of reducing these sorts of errors in the future.

The Technical Basis for the Technical Standard for Characterization of Dry Active Waste was transmitted to DOE-Argonne and EM on August 29, 2018. This report will form the basis for the Technical Standard expected to be completed in 2019.

Finally, the group continued technical, regulatory, and program support to D&D activities across the complex with emphasis on improvement of the integration of program and project management for D&D and integration of regulatory structures.



## Initiatives in FY2019

Regulatory Reform initiatives will continue to be supported to assist DOE in responses to the definition of HLW and to revise DOE Order 435.1 to address items including Consolidation and Classification. Assistance to DOE is expected to continue in the areas of DOE Order 435.1 Training and Assist Visits.

The assistance to the DOE LFRG is expected to continue for completion of the Oak Ridge, Hanford, and Portsmouth LLW Disposal Site Reviews.

D&D activities include the completion and submittal to DOE of a “Cold & Dark” Technical Standard by the D&D Subgroup.

The Technical Basis for the Technical Standard for Characterization of Dry Active Waste is expected to be completed in 2019.

Work will continue to address complex wide synergy to address solutions for the complex wide problematic radioactive wastes that exist at all the DOE sites. The Working Group will use the report of the EFCOG work to study the MLLW and LLW challenges in the DOE Complex for EM as a basis for continuation of the effort (report to DOE on September 4, 2018).

Nevada National Security Site (NNSS) requested the EFCOG WMWG to conduct a “Lessons Learned” exercise that covers the process used by NNSS waste generators to track and document closure for non-conformances (including findings) through their own (internal) quality performance systems. The objective will be to verify that non-conformance tracking, and closure are handled effectively and to identify non-conformance trends that might affect future waste profiles and shipments certified for disposal at the NNSS.

## 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.

### Accomplishments in FY2018

#### *Established solid relationship with Labor Training Working Group*

The working group developed a liaison relationship with the Labor Training Working Group, including a joint meeting in Washington, D.C. in June and a second joint meeting at the National Training Center in Albuquerque, NM in December. Two main information sharing and collaboration activities that resulted from this collaboration were:

#### *NIEHS grantee course availability across the complex*

In collaboration with the EM funded National Institute of Environmental Health Sciences (NIEHS) Worker Training Program the EFCOG Training Working Group and Labor Training Working Groups identified training already being provided by NIEHS grantees at various contractor locations and additional safety and health training capabilities of grantees able to address contractor training needs. The resulting matrix identified opportunities to improve delivery of training materials by NIEHS worker training grantees at no cost to the sponsoring contractor through improved utilization of the DOE Reciprocity program and existing EM funding to NIEHS grantees.

### *Safety Culture capabilities*

Both working groups recognized significant work has been and continues to be performed on the topic of Safety Culture. Multiple courses were created by multiple labor groups, DOE and contractor communities. Presentations were made at the December joint meeting to educate all on the offerings and possibilities.

### *Continued to expand DOE reciprocity program*

The course reciprocity program currently has over 20 providers and more than 60 courses available. Additional course candidates continue to be identified. For each course identified, task groups are formed to develop the core standard of objectives and content and the associated reciprocity checklists. The following courses have made significant progress:

Cyber Security

Training course and program evaluation

Human Performance Improvement

Radiation Protection

### *Standard review*

As a first step in reviewing, rewriting, and resurrecting selected DOE training guides and handbooks, the EFCOG TWG created a task team to explore revising DOE-STD-1070-94, Criteria for Evaluation of Nuclear Facility Training Programs. The standard currently evaluates training processes, but not training outcomes. The TWG task team is looking at outcomes-based evaluation guidelines similar to those used by Institute of Nuclear Power that would in turn support key performance indicators (KPIs) for each laboratory or site. This would in turn give common KPIs for discussion and benchmarking between facilities.

### *Training Working Group annual meeting – December 2018*

On December 4-6, the EFCOG Training Working Group held its annual workshop at the National Training Center in Albuquerque, NM. This included presentations on current topics, panel discussions, and functional demonstrations from training managers and labor representatives around the DOE complex. Registrations for this workshop were at a high with over 100 people attending. There was greatly increased participation, higher energy levels, great discussions, information exchange, best practice sharing, and joint meetings with labor TWG. Surveys indicated high satisfaction, renewed interest in what's happening complex-wide and opportunity for benchmarking, etc.



### *Mission of the DTI transitioned to the National Training Center (NTC)*

The DOE Training Institute, formerly a collaborative entity made up of the NTC and the HAMMER facility, was defunded. Its mission, which was to provide training support to DOE facilities throughout the complex, transitioned to the NTC.

### *Several best practices identified and under development*

- Training management software (Washington River Protection Solutions Training Implementation Process, High Flux Isotope Reactor Training Action Tracking System and Program Database)
- Training Implementation Matrix
- Training on overtime for FAR-based contracts

### *Collaboration with other EFCOG working groups on Training*

The TWG remains committed to providing support to other EFCOG working groups for training-related tasks. The following courses have been identified and are being worked:

- Safety Culture training - TLP150 for front-line leaders
- Electrical Safety training for non-electrical workers
- Laser worker trainer web course
- Conduct of Engineering course conversion
- Commercial Grade Dedication training
- Rad Worker consistency complex-wide
- Human Performance Improvement core training
- Knowledge capture and retention

## **Initiatives in FY2019**

The TWG will continue to provide technical expertise in promoting efforts to realize efficiencies in course creation and delivery. It will support the expansion of the Reciprocity program and the creation and implementation of standardized course materials. Members will continue the expansion of course content sharing via the Course and Related Data System.

The TWG will continue to provide leadership in regulatory reform initiatives, including revising DOE-STD-1070-94, Criteria for Evaluation of Nuclear Facility Training Programs and identifying opportunities to refresh and revise the Guides to Good Practice.

The Working Group will also continue to support the implementation of the pilot of a DOE enterprise-wide Learning Management System and evaluate the business case for member sites' use.

A major focus of the working group will be collaboration and coordination across the contractors in the DOE complex for requests for training support from DOE sites and other EFCOG working groups. Facilitation of benchmarking and best practice sharing will continue through online forums and white paper development.

The working group will also continue to work with the Labor Training Working Group on course efficiencies such as use of the NIEHS grantees and safety culture courses.

## Safety Working Group

The EFCOG Safety Working Group (SWG) is chartered to assist member companies attain and maintain the highest levels of Integrated Safety Management performance in the operation of DOE/NNSA facilities/projects. "Safety," as it relates to the scope of the working group, is inclusive of the Department's implementation of Integrated Safety Management Systems (ISMS) and includes a number of related functions such as work planning and control, engineering processes, radiological protection, nuclear and facility safety, criticality safety, fire protection, worker safety and health, industrial hygiene, environmental protection, quality assurance, contractor assurance, and related regulatory programs.

The SWG achieves this by 1) advocating strong, effective implementation of Integrated Safety Management, 2) seeking out, developing, and promoting best management and operating practices, 3) facilitating the exchange of operating experiences and information on safety and regulatory programs and their effectiveness, and designing studies and developing position and technical papers to enhance DOE/NNSA regulations and directives processes where appropriate, 4) providing DOE/NNSA and member companies access to a network of subject matter experts 5) identifying opportunities to save and/or avoid costs in the implementation of safety and regulatory programs while assisting member companies implementing effective safety and regulatory programs through peer reviews and consultations, and 6) arranging for training and awareness workshops to enhance the competency of safety professionals.

7 subgroups of SWG

- Worker Safety & Health
- Integrated Safety Management (ISM)
- Sustainability and Environment
- Nuclear & Facility Safety
- Quality Assurance
- Regulatory & Enforcement
- Engineering Practices

20+ associated task groups

### Accomplishments in FY2018

Accomplishments of the SWG during FY2018 were varied and numerous. Examples of significant accomplishments include development of a Conduct of Engineering training course which covered the key elements of engineering requirements and expectations for new hires and early career engineers. The group also developed a regulatory summary for 10 CFR 830 Subpart B as well as support on the issuance of DOE-HDBK-1224-2018, Hazard and Accident Analysis Handbook, which guides development of the DSA safety analysis for nuclear facilities satisfying the requirements of a safe



harbor method set out in 10 CFR Part 830, Subpart B. The Working Group also conducted two webinars to share details about the DOE initiative called Smart Labs, which included information about conducting laboratory risk assessments, control banding to match hazards with air change rates, and continuous commissioning to monitor facility operations. In addition, the group issued five best practices: one in the area of applying software QA graded approach to firmware and four in the area of electrical safety as part of the standard changes that are driven by the 10 CFR 851 Technical Amendment. These Best Practices are all on the EFCOG website.

## Initiatives in FY2019

The planned FY2018 initiatives of the SWG are numerous. They include initiatives such as: 1) Incorporate business assessment into CAS, 2) Issue a safety culture practitioner's guide, 3) Develop an Human Performance Improvement (HPI) assessment tool, 4) Develop guidelines for HPI metrics, 5) Develop best practices regarding suspect counterfeit items, 6) Develop suggested revisions to DOE O 232.2A and 414.1D, 7) Develop a guidance document to update and capture the important information from various regulations that drive hazards analysis, and provide possible methods for integrating hazard analysis, and provide possible methods for integrating hazard analysis activities, 8) Establish a consistent approach to engineering qualifications programs, and 9) Issue a DOE Laser Safety Best Practices for the DOE complex and the technical community of laser users in commercial and university institutions that compiles numerous best practices from previous years.

Please see the links below for detailed FY2019 plans for each of the Working Groups

Safety WG: [http://efcog.org/safety/?drawer=Safety%20Working%20Group\\*Documents](http://efcog.org/safety/?drawer=Safety%20Working%20Group*Documents)

Project Delivery WG: [http://efcog.org/project-delivery/?drawer=Project Delivery Working Group\\*Documents](http://efcog.org/project-delivery/?drawer=Project%20Delivery%20Working%20Group*Documents)

Training WG: [http://efcog.org/training/?drawer=Training Working Group\\*Documents](http://efcog.org/training/?drawer=Training%20Working%20Group*Documents)

Safeguards & Security WG: [http://efcog.org/safeguards-security/?drawer=Safeguards and Security Working Group\\*Documents](http://efcog.org/safeguards-security/?drawer=Safeguards%20and%20Security%20Working%20Group*Documents)

Waste Management WG: [http://efcog.org/waste-management/?drawer=Waste Management Working Group\\*Documents](http://efcog.org/waste-management/?drawer=Waste%20Management%20Working%20Group*Documents)



# EFCOG Fiscal Year 2018 Fund Account Summary

OCTOBER 1, 2017 – SEPTEMBER 30, 2018

<b>Beginning Balance as of 10-01-17</b>		<b>\$466,385.72</b>
<b>Receipts</b>		
<b>FY-2018 Memberships &amp; Renewals</b>	<b>\$133,750.00</b>	
<b>FY-2019 Memberships &amp; Renewals</b>	<b>\$235,500.00</b>	
<b>Interest</b>	<b>\$620.82</b>	
<b>Total Receipts</b>	<b>\$369,870.82</b>	
<b>Disbursements</b>		
<b>Misc Expenses (Bank Fees)</b>	<b>\$0.00</b>	
<b>Working Group Incentives</b>	<b>\$5,336.25</b>	
<b>Support Service Contractor</b>		
<b>Longenecker &amp; Associates, Inc.<sup>1</sup></b>	<b>\$267,044.23</b>	
<b>Total Disbursements</b>	<b>\$272,380.48</b>	
<b>Net income as of 09-30-18</b>		<b>\$97,490.34</b>
<b>Ending Balance/Management Reserve as of 09-30-18</b>		<b>\$563,876.06</b>

<sup>1</sup> Support Service costs include:

- a. Managing Director and Working Group Coordinator Support
- b. Administrative Support
  - Working Group, Member Company Coordination
  - Database Development, Maintenance, and Management
  - Internet Service
  - Website Development and Maintenance
  - Meeting Logistics and Support
- c. Printing and Distribution of Tri-folds and Other Documents
- d. Executive Council Meetings – Annual Meeting and Semi-Annual Meeting
- e. Quarterly Board of Directors Meetings and/or Teleconferences
- f. Strategic Planning Meetings and/or Teleconferences
- g. Working Group Chair Meetings and/or Teleconferences
- h. Travel

# EFCOG MEMBER COMPANIES FINANCIAL INFORMATION

## Renewed Membership for FY2018

<b>Company</b>	<b>Type</b>
AECOM	Full
Alliance for Sustainable Energy, LLC (NREL)	Full
Arcadis US, Inc.	Full
Argonne National Lab	Full
Atkins	Full
Bechtel National, Inc.	Full
Bechtel Waste Treatment Plant	Full
Booz Allen Hamilton	Full
Brookhaven National Laboratory	Full
BWXT Technical Services Group, Inc.	Full
Canberra Industries, Inc.	Full
Centerra Group, LLC	Full
CH2MHILL BWXT West Valley, LLC	Full
CH2MHILL Plateau Remediation Company	Full
Consolidated Nuclear Security, LLC	Full
Fluor Federal Services	Full
Fluor-BWXT Portsmouth LLC	Full
Honeywell	Full
Huntington Ingalls Industries	Full
Idaho National Laboratory	Full
Jacobs Engineering Group	Full
Kiewit Power Constructors	Full
Lawrence Berkeley National Laboratory	Full
Lawrence Livermore National Laboratory	Full
Leidos	Full
Los Alamos National Laboratory	Full
Los Alamos Technical Associates, Inc.	Full
Mission Support Alliance, LLC	Full
Navarro Research and Engineering	Full
Nuclear Waste Partnership LLC	Full
Oak Ridge Associated Universities	Full
Orano Federal Services LLC	Full
Pacific Northwest National Laboratory	Full
Parsons Government Services	Full
Sandia National Laboratories	Full

## Renewed Membership for FY2018

Company	Type
Savannah River Nuclear Solutions	Full
Savannah River Remediation LLC	Full
TerranearPMC, LLC	Full
UCOR	Full
University of California	Full
UT-Battelle	Full
Veolia Nuclear Solutions	Full
Washington River Protection Solutions	Full
Westinghouse Government Services	Full
Weston Solutions, Inc.	Full
Burns & McDonnell Engineering	Associate
CSRA	Associate
Fermi National Accelerator Laboratory	Associate
L&L Associates, Inc.	Associate
Merrick & Co.	Associate
MPR Associates, Inc.	Associate
PAE Inc.	Associate
Project Time & Cost, LLC	Associate
Schneider Electric	Associate
Securiguard, Inc.	Associate
Skookum Contract Services	Associate
SLAC National Accelerator Laboratory	Associate
TwentyEighty Strategy Execution	Associate
Waste Control Specialists LLC	Associate
Advanced Technologies and Laboratories Int'l	Small Business
American DND, Inc.	Small Business
ARES Corporation	Small Business
ARS Aleut Remediation, LLC	Small Business
Aspen Resources Limited, Inc.	Small Business
AVANTech Inc.	Small Business
AzTech International, Inc.	Small Business
Babcock Services, Inc	Small Business
Boston Government Services, LLC	Small Business
Chenega Corporation	Small Business
ClearPlan LLC	Small Business
Colleague Consulting LLC	Small Business
Container Products Corporation	Small Business
Federal Engineers & Constructors	Small Business

## Renewed Membership for FY2018

Company	Type
Fire & Pump Service Group	Small Business
Firewater Associates LLC	Small Business
GEL Laboratories, Inc.	Small Business
Government Scientific Source, Inc.	Small Business
HBE Consulting Solutions, LLC	Small Business
HPM Corporation	Small Business
HukariAscendent	Small Business
Humphreys & Associates, Inc.	Small Business
I.C.E. Service Group, Inc.	Small Business
Innovative Technology Partnerships, LLC	Small Business
Neptune and Company, Inc.	Small Business
Perma-Fix Environmental Services	Small Business
Pro2Serve	Small Business
Project Enhancement Corporation	Small Business
Samos Advisors LLC	Small Business
Spectra Tech, Inc.	Small Business
Strategic Management Solutions, LLC	Small Business
Swift & Staley	Small Business
Visionary Solutions, LLC	Small Business

**Total Membership Renewals and Income for FY 2018**    92                      \$345,000

## New Membership for FY2018

Company	Type
Four Rivers Nuclear Partnership	Full
Mission Support and Test Services	Full
Envirocon, Inc.	Associate
N3B	Associate
DevonWay, Inc.	Small Business
elecTrain	Small Business
Lemma Technical Services	Small Business

**Total New Membership and Income for FY 2018**                      7                      \$21,000

**Total Membership and Income at End of FY 2018**                      99                      \$366,000