



Meeting Minutes

**Energy Facility Contractors Group (EFCOG)
Integrated Safety Management Working Group
Feedback and Improvement Sub Group**

**Spring Meeting – Atlanta, GA
May 3, 2007**

**I. Welcome and IntroductionsRex Beach, Chair
Lawrence Livermore National Laboratory**

Rex Beach, Lawrence Livermore National Laboratory (LLNL), welcomed meeting participants and provided a safety and security moment to inform participants of hotel exits. He asked if others had suggestions. Joe Yanek spoke up to remind people of the safety concern regarding hotel shuttle drivers' aggressive driving styles, and strongly recommended that folks wear their seatbelts in the shuttles when traveling to and from the airport. Marla, Lawrence Livermore National Laboratory (LLNL), spoke up to make participants aware of the tripping hazard at the center media table, noting that two people had tripped on the cord behind the table the day before, and to please use caution.

After the Feedback and Improvement (F&I) safety moment, Rex asked that all participants introduce themselves. Participants included:

| | |
|--------------------|---|
| Beach, D. Rex | Lawrence Livermore National Laboratory |
| Blowitski, Raymond | Department of Energy, Headquarters |
| Boyle, Eugenia L. | Department of Energy, Headquarters |
| Branson, Gary | Idaho National Laboratory |
| Brockner, Will | Aragon National Laboratory |
| Carpenter, Marla | Lawrence Livermore National Laboratory |
| De Grange, Connie | Lawrence Livermore National Laboratory |
| Grant, Gary | CH2M Hill, Hanford |
| Horning, Pamela | BWX Technologies |
| Johnson, Steve | Savannah River Site |
| Tye, Jayne | Nuclear Decommissioning Authority, United Kingdom |
| Yanek, Joe | Fluor Corporation |

Pam Horning, EFCOG Chair, spoke about how large the EFCOG group had become (65 companies strong). She commented on the good ideas brought forward, as well as the good collaborations across the board, especially collaborations with DOE on 10 CFR 851. Pam noted that she has been involved with EFCOG for four-to-five years, and during that time has had numerous opportunities to network and collaborate, and to involve DOE with EFCOG initiatives, which in her mind is a testament to EFCOG's achievements. Pam would like to see EFCOG continue to grow, and reminded F&I Sub Group participants that EFCOG is all about making commitments and producing results. She stressed the importance of making commitments that are realistic in order to live up to the expectation of meeting those commitments and producing those results.

Pam talked about the new EFCOG Working Group on performance assurance, noting that their function is to perform peer reviews across DOE Sites. DOE values these peer reviews to the point of accepting them as their own, resulting in DOE performing fewer self-assessments.



The F&I subgroup was then encouraged by Pam to take the Best Practices and initiative discussed at EFCOG meetings home. She would like to see them used and implemented across the sites.

A real concern of Pam's is a lack of communications across the EFCOG groups. She asked the question, "Do we all *really* know what each other is doing?" The message here was to become more involved across EFCOG groups, and to provide valuable, consistent feedback.

Pam let everyone know that her End of Year report had been posted to the EFCOG Website, and along with that, made the following announcements:

- Bruce Warner, LLNL, stepped down as an EFCOG Director
- Mark Spears, CH2, has taken Dr. Warner's place as an EFCOG Director
- Out of the 13 EFCOG board members, some are new; Pam did not have specifics
- EFCOG holds four meetings per year. The next Annual Meeting is scheduled for March 2008 in Washington, D.C.

Howard Hatayama, Lawrence Berkeley National Laboratory, thanked Pam for her concern regarding communication efforts, and asked what DOE's reaction was to the white paper. Pam responded by stating that DOE's reaction was positive; however, there is some concern on how to approach the tasks. She is working on it with DOE and others; they are currently in dialogue.

Pam finished by saying the collaborations and efforts are beginning on how to move effective EFCOG members into key DOE Complex-wide positions.

II. Presentations/Updates

A. IWS Working Group Update: Joe Yanek Fluor Corporation

Joe began by stating that change is inevitable and growth is optional. EFCOG began with 16 partnering companies and now DOE is using EFCOG as a key source more than ever.

- Chuck Lewis is covering the HSS organization for ISM Working Group Leader.
- Dave Amerine is Sponsoring Director now; Bob Pedde is gone.
- Environmental and Occupational Medicine is not present; met earlier in the month in New Orleans.
- EFCOG now a very large group. It is logistically difficult to bring everyone together.
- Regarding issues on 10CFR851 to DOE; never heard anything again. DOE is either not willing or is unable to collaborate on issues around 10CFR851 due to 851 rules, which has been very disappointing and frustrating.
- EFCOG now has an Electrical Safety Working Group with has the best folks from around the country. They are already making good progress. There has been a downward trend in electrical incidents over the past three years, per ORPS data. Events are still a concern. In contrast to the "draw the line in the sand" stand of 10CFR851, DOE has worked well with the electrical safety folks and EFCOG to make excellent progress.
- FAQs on 10CFR851:
 - Will DOE take and provide guidance?
 - Most FAQs came from EFCOG. A couple of white papers (without EFCOG input) came out on 10CFR851, and that's all that really exists. The Office of the General Council is the only provider of interpretation.



- Jeannie mentioned that and ORPS guidance document is to be updated. They are awaiting updates on electrical and other EFCOG issues. Joe let Jeannie know that he will have approved updates for her to draw from on June 15, which will be posted to the Web site.

**B. Implementation Status DOE O 210.2 Operating Experience Ray Blowitski
Health, Safety and Security (HSS) Organization**

Ray followed his PowerPoint presentation closely. Please see his attached slides for information regarding the latest on DOE's implementation of the DOE O 210.2, "DOE Corporate Operating Experience Program."

**C. EFCOG Best Practice Program.....Will Brocker
Argonne National Laboratory**

Will opened by mentioning that all of EFCOG's best practice issues are handled from the F&I Subgroup. He then presented a quick talk on the new Best Practices Web site and shared a handout with the group describing how to submit best practices for dissemination throughout the DOE Complex (see attachment).

- Will's presentation touched on the following topics:
 - Where to find the Best Practices Web site
 - Description of a Best Practice
 - Identifying a Best Practice
 - Currently there are 17 topical areas or categories wherein EFCOG's Best Practice fall (with more in development)
 - Currently 47 Best Practices published to the Best Practices Website, with several more in the pipeline
 - Planned activities should be coordinated through contacts listing on the Best Practices Website
 - Howard Hatayama and Will discussed a solution to enable DOE and EFCOG's member companies to utilize the Best Practices Web site for two-way communication. Will should obtain others' Web site addresses and post them to the Best Practices Web site for the purpose of sharing information related to Best Practice updates, questions and suggestions.
 - Will finished by stating that the core mission of the Best Practices Working Group is to share Best Practices with its members and to facilitate the submission of Best Practices through the Web site.

**D. Human Performance Improvement (HPI) Causal Analysis.....Gary Grant
CH2M Hill, Hanford**

Gary delivered a presentation discussing the basics of HPI and the concepts around accident investigations, looking at the "old view" versus the "new view." Below is a bulleted list that captures the key points of his talk:

- The HPI approach is causal analysis investigation with "old techniques" along with human performance considerations — a blend of the two.
 - Fact finding
 - Investigation
 - Causal analysis
- Incidents, events and accidents are 30% due to human performance and due 70% to latent organizational weaknesses.
- We are trying to move away from the human blame cycle and move towards looking at the "big picture."



- Root cause analysis has focused too much on personal blame and flawed defenses, and has not focused enough on organizational factors.
- Traditional Root Cause – The investigator is already aware of the circumstances around the event and has developed a bias.
- Root causes can be affected by
 - Process
 - Mission
 - Goals
 - Constraints
- Barrier analysis, according to author James Reason, shows that at least four barrier causes can be identified. NOTE: The “old view” focuses only on “individual barriers,” whereas the “new view” focuses on all four barriers (listed below):
 - Individual barriers
 - Programmatic barriers
 - Organizational barriers
 - Management barriers

| Old view (easy) | New view (difficult) |
|---|--|
| Human error is the cause | Human error is the symptom of deeper trouble |
| Explain failure of individual(s) | |
| Bad judgments and poor decisions of individuals | Effort to understand why decision were made at the time of the event |
| Evaluate against procedures | |

- New view approach results in the discovery of issues within the organization and situations that may lead to more occurrences.
- New view approach:
 1. Event happens
 2. Begin the interview process ASAP to determine without bias:
 - What happened
 - Why you think it happened
 - A credible (accurate) timeline
 3. Validate key decision points
 4. Identify the options the participant/interviewee had at the time
 5. Separate fact from fiction
 6. Reconstruct the event
 7. Evaluate the organizations performance at key points or decision points during the event
- Organizations need to be careful not to develop processes or revisions to procedures in response to events that tighten things up to the point that workers cannot adequately achieve results. When this happens, workarounds are developed, which cause accidents.
- Comment by meeting attendee: Use care, as well, to include worker input when developing procedures. Often procedures are developed when workers are already doing the work. Without their input, processes and steps are missed and the new procedure or updates to procedures set the workers up for non-compliance.
- A suggestion was made for meeting participants to take a look at the 2005 INPO document, which describes several warning flags and offer some very powerful concepts. Take a look prior to making assessments.
- Comment from Rex Beach: When looking at organizational weaknesses, look at the organization from a *broad* perspective (not just the localized organization) to see the *latent* organizational weakness.



**E. Invited Guest of the Nuclear Decommissioning Authority..... Jayne Tye
Nuclear Decommissioning Authority
United Kingdom**

- Jayne visited the EFCOG meeting as an opportunity to understand what an organization like EFCOG has to offer and whether or not an organization like EFCOG could benefit the needs of the Nuclear Decommissioning Authority and/or the United Kingdom as a whole.
- Jayne mentioned that among the (nuclear) energy sites and community within the UK, there are some organizations that have never communicated, resulting in what she described as a fragmented and vulnerable industry.
- Jayne works in a safety assurance group, not a regulatory authority, which translates to virtually no possibility of initiating policy or enforcing recommendations resulting from audits and assessments. It is a frustrating way to do business and ensuring safety among facilities is difficult.
- The UK's industry is undergoing a revamp to include:
 - BNG sale
 - UKAEA transfer
 - SLC site licensed contractor formation
 - Development of pensions
- To contact Jayne Tye, please see contact information below. Per Jayne, she is very interested in hearing from the EFCOG members and looks forward to future communications.

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Nuclear Decommissioning Authority
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III. Report Outs

**A. ORPS.....Jeannie Boyle (for Gary Branson)
Department of Energy, Headquarters**

- Electrical safety tool approved by EFCOG and DOE, and is now posted on the EFCOG Web site
 - There is an Electrical Safety Conference happening on July 18, 2007, where a revision to the electrical tool (document) may be developed.
 - Rex commented that the tool has been approved but most of the Livermore Site Operations (LSO) Field Representatives (FRs) are not aware of an electrical safety tool, and are certainly not aware that it has been approved and posted to the EFCOG Web site. He noted that there is an interface/communication problem between LLNL's ORPS system and LSO, as well as a DOE/HQ interface/communication problem with LLNL's LSO FR. Jeannie responded by saying that she will develop guidance and provide it to LSO, but that there are some minor hurdles to address first.



- The HPI and ORPS Working Groups joint meeting, which occurred earlier in the day, resulted in some good proposed actions:
 - Four to six sites will/should be identified to participate in a pilot for applying HPI implementation into causal analysis efforts.
 - If the need arises, Todd Conklin will be invited to host a one-day training course at the next EFCOG meeting.
 - The idea to hold more joint or cross-Working Group/Sub Group/Task Group meetings was tossed around, and the group seemed to agree that joint meetings facilitate robust conversations among participants; more of these joint meetings should be scheduled during future EFCOG meetings.

**B. Performance Analysis Connie De Grange
Lawrence Livermore National Laboratory**

- The draft EFCOG Guide on Performance Analysis was posted as a draft to the EFCOG Web site for comment. Some changes have been made. Comments from Bill Luce, Safety Analysis Working Group Chair, were included, but the guide needs further review.

**C. Nuclear Facility Readiness Steve Johnson
Savannah River Site**

- The Nuclear Facility Readiness group is a new Task Group to EFCOG.
 - The following seven task teams have been developed:
 1. Achieving Readiness
 2. Readiness Review Level Determination
 3. Startup Notification Reports
 4. Readiness Review Process
 5. Standard Definitions
 6. Continuous Improvement
 7. Training
- The Standard Definitions Task Team is the most difficult to address. The timeline is several months out.
- The product of the Readiness Task Group will be an EFCOG Contractor's Guide.
- See Steve's presentation (attached) for more regarding the objectives of this new Task Group.

IV. Open Forum

A. General Discussions Open Floor

- The role and scope of the F&I Sub Group is being looked at by Rex, Steve and Joe, with ongoing discussions.
- There are problems with the integration of system (up to four databases), which make utilizing these systems overwhelmingly task intensive.
- There are issues around the integration of PAAA and 10CFR851 reporting within the ORPS system.

V. Next Meeting

The next meeting will be in October or November 2007. Site to be determined. Additional information will be provided as it becomes available.



VI. Closing

A. Tasks..... Open Floor

- 1) Human Performance Improvement
 - a) Electronically disseminate 2005 INPO Guidelines for Performance Improvement. Rex to obtain an electronic copy from Gary Grant.
 - b) EFCOG members would like to see a “roadmap” describing the HPI approach to implementation.
- 2) Causal Analysis
 - a) EFCOG has several groups working on their own causal analysis processes. We need to develop a consistent approach, required for:
 - Conducting analysis
 - Extent of condition
 - Developing and validating corrective actions
 - b) It was suggested that the F&I Sub Group take the lead on Causal Analysis.
- 3) F&I Sub Group to develop a performance improvement guidance document for the DOE community to ensure all practitioners are “on the same page.”
- 4) The EFCOG organizational chart needs to be updated with an added list of areas of responsibility, which will offer needed clarity.