

## **EM Quality Assurance Corporate Board Meeting**

**November 13 – 14, 2008**

**Atlanta, Georgia**

**Meeting Minutes**

### **November 13, 2008**

Dae Chung (EM Headquarters) provided opening remarks. This is the third EM QA Corporate Board meeting this year. Dae introduced Robert Brown (DOE Deputy Site Manager – Oak Ridge) and asked him to make additional remarks. Mr. Brown discussed Oak Ridge's integration of ISO 9001 within NQA-1 and setting up an interdisciplinary team with ISO folks from Chicago participating on the team. Andrea (Cissy) Perkins (EM Oak Ridge QA Manager) commented on the value of working with the contractor to integrate QA across the site.

Bill Murphie (EM Site Manager - Portsmouth/Paducah Project Office) commented that since many work activities are not performed on a routine basis, he needs to continuously remind the PPPO contractors that they need to be more cautious. Although minor mistakes happen occasionally, there are still potential criticality events. The PPPO strongly supports the QA Corporate Board initiatives. Mr. Murphie stated that the challenge is to make sure we can implement effectively the requirements. The re-compete of six major contracts is going on at the same time they are going through NQA-1 changes. The question is how much money should be spent with contractors that only have a year or so left on their contracts. There is a need to match up real requirements with the needs of the organization. Dae Chung commented on the new hexafluoride plant going through startup and testing in preparation for an Operational Readiness Review in the future.

Dae thanked Joe Yanek (Fluor) for setting up and sponsoring this QA Corporate Board meeting. Joe Yanek thanked Jazmin Everett (EM Headquarters) and Dave Rose (Fluor) for taking care of the administrative issues and logistics for the meeting. Dae Chung led the introduction of the Corporate Board members and other meeting participants. Sandra Waisley (EM Headquarters) gave an overview of the agenda. She indicated that the November 13<sup>th</sup> agenda included presentations on QA lessons learned and Commercial Grade Implementation (history), and an overview of actions and accomplishments since the second QA Corporate Board meeting held on July 29-30<sup>th</sup> in Denver, CO. Further, there would be a report out from the EM/EFCOG QA Improvement Initiative's five working groups. Project Focus Areas included: QA Requirements Flow-Down; Adequate Nuclear Suppliers; Commercial Grade Dedication Implementation; Graded Approach Implementation, and Line Management Understanding of QA and Oversight.

Mike Mason (BNI) discussed program failures based on a nuclear utility presentation entitled, "Fall from NRC's Grace." Over a 24-month period, a top performing utility for over 10 years went from the top to a

marginally performing plant. In conducting the causal analysis for this utility the following were identified:

- QA lacked management support. QA was a secondary responsibility.
- No process for escalating issues
- Nobody managing issues to closure – conflicts with day-to-day priorities and no accountability
- QA reports went from monthly to quarterly to annually
- No replacement of lost oversight resources due to attrition and funding
- Training of oversight personnel was marginal
- Corrective action review board met infrequently and was not represented by the appropriate level of management
- Corrective action review board rejected approximately 5 % of the corrective actions, while QA was rejecting approximately 50% of the same corrective actions
- Severity levels were frequently downgraded resulting in inappropriate corrective actions
- Extensions were granted on a regular basis, and 30 days became 60 days, then 90 days
- Configuration management process was ineffective
- Because of their NRC standing as a top performer, they didn't benchmark, and without strong oversight they became arrogant, complacent, and isolated. This led to their downfall.

There was considerable discussion following Mike's presentation, with the conclusion that we need to be performing self-assessments and rigorous QA oversight to ensure that what caused the problems experienced by this utility are not occurring at the DOE sites. Dave Jantosik (BNI– WTP, Hanford) elaborated on the need for a strong corrective action program, without which, spills over to the QA program, configuration management, etc. Mike Mason talked about what BNI is doing regarding training for NQA-1 vs. DOE O 414.1C in an attempt to bring some clarity to the organization on QA implementation. Leo Sain (URS) discussed the state of TVA in the mid 1980's, that they had all three of the attributes of complacency, arrogance, and isolationism. From the URS standpoint, they need to perform more training. A bigger problem is to avoid becoming complacent, arrogant, and isolated in the organization in terms of the QA program. Dave Amerine (Parsons) talked about the Davis-Besse and Millstone nuclear reactor problems. The Davis-Bessie nuclear reactor facility experienced a suffocation of corrective actions, and at the Millstone facility there was an effort to not raise issues up the chain of command.

There was a brief discussion on the need for effective performance indicators so you get indicators of falling QA performance before it hits rock bottom. Norm Barker (*EnergySolutions*) mentioned an NEI lessons learned document regarding corrective actions programs. There should be an action item to recover this lessons learned and distribute it to the Corporate Board participants. Bill Murphie asked if DOE has similar tools that NRC has to evaluate how the nuclear utilities rank relative to the NRC criteria. Dae Chung mentioned his conversations with NRC in which NRC expressed interest in DOE's ISMS. NRC is looking at forward looking indicators for evaluation of plant performance. Dae asked about self-assessments and what self-assessments have been planned and completed. Joe Yanek suggested that the Board consider the need for more qualified/certified QC personnel in the field. There is a need to

look at the Quality Control issue at some point within the Board. Dae Chung will take an action item to determine how NRC evaluates the utilities and to look at the QC issue raised by Joe Yanek.

Sandra reviewed the action items from the previous QA Corporate Board meeting that was held on July 29-30<sup>th</sup> in Denver, CO. All action items have been accomplished except one, to develop a more detailed survey of the contractor QA resources at the sites. Sandra mentioned the upcoming Regional Nuclear Suppliers Outreach Event on March 17 – 18, 2009, at the Savannah River Site. The outreach should involve NEI, NNSA, NRC, and DOE hopes to involve the regional universities/colleges, local trades, local Chamber of Commerce, and the international community. There will be more information to be provided on this event at a later date.

Focus Area # 1 – Butch Huxford (EM - Headquarters) and Alice Doswell (Parsons): The model assumptions slide should include another bullet that shows DOE O 414.1C as an assumption. There was discussion and confusion on what the quality levels mean. The levels need to be defined and have specifications relative to each level. The EM Corporate QAP defines NQA-1-2004 as the standard. There was a comment that these are minimum requirements and that mission critical items could be raised to QL-1 or QL-2 levels. There was quite a bit of discussion on the need to evaluate vendors (other than just paper program reviews) prior to award of contracts. The cost of rework exceeds the cost of the evaluation. There was a question as to whether access to NRC supplier history is available to DOE. A suggestion was made to put the regulations at the top of the list of requirements.

Focus Area # 2 – Bill Rowland (EM – Savannah River): Bill Murphie stated that his site is more concerned about small contractor shops than the major EM contractors. It was suggested that any vendor on an EM QSL should be required to mentor other small businesses such as with the Voluntary Protection Program (VPP) model. It was suggested that alerts of vendor non-performance should be inserted into the DOE Corporate Lessons Learned Database process. Need to show feedback from DOE Office of Health, Safety and Security (HSS) industry experience review process. Need to consider identifying specific aspects of the supplier issues as part of the alert process. Dae Chung made a suggestion to select a commodity or two for a pilot test. The Working Group also needs to refine the end process of the ALERT System flow diagram.

Dave Jantosik provided an overview of the Broad Based Review (BBR) conducted at ORP/WTP.

Focus Area # 3 – Shelby Turner (CH2M HILL): There was discussion on how the Commercial Grade Dedication process should be institutionalized and promulgated across the EM-complex. Joe Yanek suggested that the consistency occurs through EM's endorsement of an EFCOG contractor's guide. In addition, it was suggested that a process flow chart be developed to identify the beginning-to-end process.

John Adkins (Southern Company) provided a presentation on the history of the NQA-1 Commercial Grade Dedication process.

Focus Area # 4 – Mike Hassell (WCH): Joe Yanek suggested implementing a procurement grading process to use as a model for an expanded grading process. A lot of debate took place on what graded

approach means, what tailoring means, what quality level means, etc. It was apparent that there is no unanimous understanding or agreement on what the terms mean. The team accepted an action item to re-baseline the graded approach, and schedule a meeting the following week to review the Project Plan work scope.

Focus Area # 5 – T.J. Jackson (EMCBC): There was quite a bit of discussion regarding implementation of the EM Corporate QAP.

Tim McEvoy (BNI - LANL) provided a presentation of the lessons learned at LANL. Most of the discussion following the presentation related to how a contractor could be selected by DOE that had no QA experience. There were some questions related to what the procurement documents required for QA requirements.

### **November 14, 2008**

Jazmin Everett confirmed the Denver Nuclear Suppliers Outreach Workshop information is posted on the EM Website, Safety and Quality Assurance – see link for this event. The next nuclear suppliers outreach event is being planned for March 17 and 18, 2009, in Aiken, South Carolina.

Chuck Munns (SRNS-Savannah River) provided a briefing on the Savannah River Site. He talked about the transition and that the site office is looking at the quality and effectiveness of work. There were approximately 160 items that went into the tracking system. Phase III is getting into effective operations and quality, safety, and conduct of operations. Next step is to focus on efficiency of operations. Wright Industries was the contractor that had, through a series of QA manager replacements, “lost” their QA program. However, it was not just Wright Industries, but also the sub-tier -- small “Ma and Pa” shop that held the key to the success of the project. Lesson Learned - ensure that the prime contractor fully discloses its strategy for using subcontractors, and how they ensure the quality of the subcontractors.

Dave Faulkner (EM - Headquarters) provided a status of the QA training Academy. The first course was in October 2008. The Software QA section was weak and needs to be revised, and the Carlsbad, New Mexico location is not easy for course participants to access. The course needs to be updated to keep it relevant and current. This was the first phase of a four-phased approach. Phase II will be an on-the-job training approach to be rolled out in February/March 2009 time frame. Phase III focuses on the qualification for lead assessors to be implemented next summer 2009. Phase IV is the ongoing mentoring and career development process. Sandra Waisley reported that course updates will be completed by December 31, 2008.

San Horton (DNFSB staff) attended the training course and thought that it was very important to have attendees representing a cross-section of the EM sites (large and small) so they are all hearing the same message about QA. Cissy Perkins initiated a discussion regarding who should be the certifying official for EM QA lead assessor certifications.

Jack Craig (EMCBC) discussed the proposed standard QA language for EM contracts. A question was asked about the impact to small contractors who may not have an NQA-1 program. The language may need to be changed to address this issue. The language needs to be clear on what all the terms mean. Many suggestions were offered to enhance the language.

Bob Toro (EM Headquarters) provided an overview of the site resources. There was discussion regarding whether the Facility Representatives should be included as QA resources. It was felt that since the Facility Representatives are not full-time QA resources that they should not be included as QA resources.

Jim Davis (EM Headquarters) provided an overview of the EM Corporate Performance Metrics pilot tests and the results. Mike Hassell provided an overview of the lessons learned from the Washington Closure Hanford Pilot. Wayne Wentworth (*EnergySolutions*) provided pilot results from the Portsmouth/Paducah facilities.

Bob Murray (EM Headquarters) presented the QAP Implementation Roadmap overview. He referenced a November 5, 2008 letter by Ines Triay (EM-2). Joe Yanek asked that if a contractor already has an approved program, does the contractor have to go to the expense of renaming the program to be consistent with the terminology being used in the presentation (answer is “no”). There was some confusion expressed regarding the implementation dates of June 30, 2009, September 30, 2009, and December 31, 2009. Dae Chung took an action to make sure there is consistency and the dates are clear. He will clarify what was meant by the June, September, and December dates.

Wrap-up and feedback – Mike Mason suggested that obtaining personnel support for the EM assessments through EFCOG is a problem - i.e., the availability of contractors to support these assessments on short notice has been a continuous issue. We need to have a list of Senior Site Managers who can be contacted on short notice and ensure that individuals are available to support EM assessments. Contractors are expected to support this out of their own funds. Mike suggested that EM fund the contractor support.

The meeting was concluded with a suggestion that the next EM QA Corporate Board meeting is scheduled the day before or after the EM Nuclear Suppliers Outreach Event, tentatively scheduled for March 17 and 18, 2009 in Aiken, South Carolina. There was consensus that it would be a good time for the next meeting.

The meeting was adjourned at 11:45 a.m.

**EM Quality Assurance Corporate Board Meeting Follow-Up Actions**  
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**General:**

1. Invite NRC to the next Board meeting to discuss 1 – 5 columns binning - staff person from inspection program or new licensing program (Chung/Waisley).
2. Plan/initiate task on surveying EM-complex contractors on their in-house QA staff resources (Waisley/Yanek).
3. Review and comment on the Graded Approach White Paper (Working Group #4) by December 5, 2008 (Executive Committee).
4. Review and comment on proposed standard QA contract language by December 5, 2008 (Executive Committee). Discuss proposal with Jack Surash, DAS of Project Management and Acquisition (Jack Craig).
5. Revise new EM Performance Metrics System incorporating lessons learned from pilot tests conducted at EM sites. Submit to Executive Board for formal approval before EM-3 (COO) issues to field sites for full implementation (Davis/Waisley).
6. Plan next Board meeting in Aiken, South Carolina, in conjunction with the 2<sup>nd</sup> Nuclear Suppliers Outreach Event scheduled for March 17 – 18, 2009 (Waisley/Everett).
7. For subsequent Board meetings include on the agenda a QA mini-case study(s) or lessons learned session (Waisley).
8. Include NQA-1 training for small businesses in conjunction with the 2<sup>nd</sup> Nuclear Suppliers Outreach Event in Aiken, SC in March 2009 (Waisley/Faulkner).
9. Reminder: vet Working Group deliverables via the Executive Committee before presenting to the Board for a vote.

**EM/EFCOG QA Improvement Project Plan (Focus Areas or Working Groups):**

1. Working Group #1: revise wording on model assumption #1 (page 2 of Overview Presentation).
2. Working Group #1: address interface issues pertaining to engineering, procurement, and QA functions, for example, in the *Flow-Down of Requirements* White Paper. Address suppliers subcontracting strategy. Include CGD in flow-down model – need to know if the supplier is using CGD (CGD package as a deliverable).
3. Working Group #2: need to refine the end process of the ALERT System flow diagram. Initiate development of an approved Qualified Suppliers List (QSL) for EM-Complex – start with one commodity for a pilot test (Working Group). Invite NUPIC to next Board meeting to discuss its QSL process (Waisley/Tuttel).
4. Working Group #3: update team member list; Project Managers need to obtain more information from Co-Leads on benchmarking exercise. Change Task #3.8: from tutorial program to training program (“train the trainer”), but wait for benchmarking exercise results.

5. Working Group #4: need to re-baseline scope/tasks, and ensure that the Graded Approach White Paper excludes tailoring language and focuses on cross-walking quality levels to procurement levels (Dave Tuttel will schedule meeting on Nov. 19<sup>th</sup> with Executive Committee, Project Managers, and Co-Leads).
6. Working Group #4: add Cissy Perkins (ORO) to the team membership.
7. Working Group #5: present and discuss new QPR Quad Chart in the Federal Project Directors Bi-Weekly meeting (S. Waisley).
8. Working Group #5: revise the EM Federal Site QA Resources Summary Table (for ex., eliminate 17 RL facility representatives from table). Make sure the table reflects the process for lead auditor certification in HQ and the sites.
9. Request Working Groups to change contractor company affiliations in Project Plan (Waisley/Tuttel).

Suggestions to Consider:

1. The Board should take up benchmarking – to facilitate changing expectations and raising the bar (Gary Grant).
2. Small businesses mentoring other small businesses should be part of the criteria to be selected on the EM QSL (Bill Murphie - PPPO). Look at the BBP model (Mark Brown – ID).
3. Invite Reinhard Hinterreither, President and CEO, National Enrichment Facility (LES) to speak at the next Board meeting in March 2009 (Dae Chung).
4. Present case study or lessons learned briefing on ORO K-25 facility at the next Board meeting (Robert Brown – ORO).