



Highlights
DMCC Program Teleconference 09-04
Tuesday, September 15, 2009, 12:30–1:30 p.m. EDT

Participants

Tom Bellinger, BWXT Y-12	John Harris, DOE-OROO
Kevin Birdwell, ORNL	Chuck Hunter, SRNL
John Ciolek, Alpha-TRAC	Carl Mazzola, Shaw Environmental
Dorothy Cohen, ORISE	John Merrick, Consultant
Gerry Gibeault, INL	Jeremy Rishel, PNNL
Cliff Glantz, PNNL	Gustavo Vazquez, DOE-HS-21

I. Roll Call

Carl Mazzola conducted a roll call and acknowledged that twelve individuals involved in the DMCC program were present and called the teleconference to order.

II. Administrative Matters

A. Previous Teleconference Highlights and Action Items

Carl Mazzola stated that highlights of the previous teleconference are posted on the DMCC portion of the EMI SIG web page.

B. DMCC Action Item Status

Carl indicated that an updated DMCC Program Action Item (AI) listing was included with the agenda. The existing DMCC AI list and assist-visit status table will be updated on the basis of information exchange during this teleconference and from developments of other relevant events.

III. Assist Visit Status

Carl discussed the status of the ongoing DMCC Assist Visit (AV) program.

Y-12

Tom Bellinger continues to address the 24 observations and recommendations from the May 24–25, 2008 AV.

Hanford

Will Shaw continues to address the 28 observations and recommendations from the September 25–26, 2008 AV which was issued in June 2009. One important recommendation, associated with developing a back-up polling site at the Federal Building to avoid a single point of failure, is moving forward.

Oak Ridge National Laboratory (ORNL)

Kevin Birdwell continues to address the 23 observations and recommendations from the March 24–25, 2009 AV which was issued in June 2009. Kevin is meeting with Matt Parker and Carl Mazzola at SRS on October 15, 2009, regarding the implementation of some of the more controversial recommendations.

Savannah River National Laboratory (SRNL)

An AV was conducted on June 9–10, 2009 and the AV team developed 11 observations and recommendations, which was well-received by both DOE and SRNL stakeholders. The final report was issued in September 2009. Chuck Hunter indicated his appreciation of how the AV was conducted and mentioned that SRNS and DOE top management are interested in seeing the report which showed a very strong program. SRNL is presently using end-of-year monies to work on the redundant data acquisition system. In addition, three sonic anemometers have been purchased.

Brookhaven National Laboratory (BNL)

An AV was requested by Joe Terranova at the EMI SIG meeting after Jim Fairbent referred him to the AV Team leader. BNL formally requested an AV in June 2009 and the AV took place on July 28–29, 2009, with 17 observations and recommendations. The draft report is due September 30, 2009.

Lawrence Livermore National Laboratory (LLNL)

The Spring 2008 LLNL downsizing resulted in the loss of its two operational meteorologists. In addition, LLNL is the only major DOE/NNSA site that has not had an AV. The possibility of a December 2009 AV is under discussion.

Idaho National Laboratory (INL)

In a formal response to the 2004 AV, Kirk Clawson is requesting a follow-up AV for April 20–21, 2010.

Los Alamos National Laboratory (LANL)

Scot Johnson requests a follow-up AV in the Summer 2010, which will be 4 years since the initial AV.

Pantex

Brent Bowen will conduct a self-appraisal of the Pantex site in February 2010. The last AV at Pantex was conducted in April 1997. The DMCC may augment this self-appraisal, if requested.



IV. DMCC Projects

AI 07-02: DOE EH-0173 Update and Draft DOE O 458.1: Gus Vazquez provided a status on the DOE EH-0173T update which is a companion to the upcoming revision of DOE O 5400.5, *Radiation Protection of the Public and the Environment* (DOE O 458.1). Draft DOE O 458.1, which will be consistent with 10 CFR 835 and DOE O 450.1A, includes ICRP 60 dosimetry, as well as ICRP 103 terminology, is closely aligned with Integrated Safety Management System (ISMS) requirements and also contains requisite meteorological requirements. It is presently undergoing a directive review board briefing and is expected to go to RevCom in October 2009. After the 45–60 day RevCom review, the comments will be resolved and this order is expected to be issued in the spring.

The revised eleven-chapter 1991-vintage DOE/EH-0173T guidance, updated to align with the new order, is being held at HS-20. Once the changes to DOE O 458.1 are finalized, and it goes through RevCom, the revision of DOE/EH-0173T can be completed to ensure consistency between the two documents. DOE/EH-0173T is expected to be issued 6–12 months after DOE O 458.1. Gus will request a DMCC review of Chapter 5 of DOE/EH-0173T since it was prepared in 2004. **ACTIVITY PROCEEDING.**

AI 08-03: DOE/NNSA Meteorological Program Equipment Survey: The work on the DOE/NNSA meteorological program equipment survey is being jointly conducted with the Nuclear Utility Meteorological data User Group (NUMUG) with John Ciolek leading the effort. The survey frequency will increase since its small and compact segments can be filled out in 10–15 minutes. John is working with NUMUG and the third mini-survey was sent out to both NUMUG and DMCC members on July 24, 2009, with a fourth survey projected for the end of September to complete the hardware portion of the mini-surveys. Three more mini-surveys, after the fourth, will address operations. John hopes to have survey results by the October 2009 NUMUG Meeting. John will check with Ken Wastrack as to why Hanford and Savannah River did not receive survey requests. **ACTIVITY PROCEEDING.**

AI 08-05: DMCC Consequence Assessment Self-Appraisal Guide: Carl indicated that the DMCC Consequence Assessment Self-Appraisal Guide is under NA-41 review. **ACTIVITY PROCEEDING.**

V. DMCC Issues

AI 06-12: Cliff Glantz updated the progress on meteorological data Software Quality Assurance (SQA) standards. The value of this product is to have it available if NNSA/DOE site managers request it, and to commercial suppliers to ensure that they integrate it into the new instrumentation software. The standards focus on the most important SQA elements including configuration management, user's guides and documentation, and adequate verification and validation. A draft of the SQA guidance for DMCC review is targeted for late-September 2009. The SCAPA Consequence Assessment Modeling Working Group will discuss the final guidance document in a teleconference on September 24, 2009. **ACTIVITY PROCEEDING.**

VI. Status of Related Federal/Private Sector Programs

AI 04-11: Meteorological Monitoring and Meteorological Modeling Voluntary Consensus Standards (VCSs):

DMCC members are involved in the development and maintenance of eight national voluntary consensus standards (VCSs) with the American Nuclear Society (ANS) as the Standards Development Organization (SDO). The status of each of these 8 standards development efforts is as follows:

- **ANSI/ANS-2.15, ANSI/ANS-2.16, and ANSI/ANS-3.8.10:** John Ciolek indicated that after ANSI/ANS-2.15 moves into the consensus review process, ANSI/ANS-2.16 and ANSI/ANS-3.8.10 will be developed. The ANSI/ANS-2.15 working group reformatted and changed the focus of the standard from descriptive to prescriptive. A draft for consensus review of ANSI/ANS-2.15 is projected for January 2010. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.21:** The ANSI/ANS-2.21 working group submitted the draft standard for Nuclear Facilities Standards Committee review in June 2009. It is targeted for publication by December 2009. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.3:** The ANSI/ANS-2.3 working group's revised draft of ANS-2.3 is targeted for issuance in February 2010. This standard supports Natural Phenomena Hazard (NPH) DOE guides and standards. Carl will send a copy of the latest draft to Chuck Hunter for review. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.31:** A Project Initiation and Notification System form is being prepared and a working group is being formed to develop a new standard on extreme precipitation events. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-3.11:** Matt Parker is the new chairperson of ANSI/ANS-3.11. It was determined that this standard is adequate for the present time and will be submitted for reaffirmation some time in 2010, when it reaches its 5-year sunset. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-58.25:** The standard associated with Level III probabilistic risk assessments addresses both meteorological data and atmospheric transport and diffusion models for risk-informed safety evaluations. Carl met with the Working Group in Atlanta, Ga. in June 2009 alongside the Annual ANS Meeting. A future working group meeting is scheduled for October 19–23, 2009, at ANS Headquarters in Chicago, Ill. to prepare for consensus review. **ACTIVITY PROCEEDING.**

VII. NNSA/DOE Site Initiatives

AI 09-01: John Ciolek indicated that John Michalakakis of the National Center for Atmospheric Research (NCAR) is not doing much more work in this area, but NCAR continues to develop the WRF model on Graphical Processing Unit (GPU) hardware. The GPU programming language is a special form of C code to which the Fortran code needs to be converted. There is still a need to rewrite the code to the C language specific to GPUs and the Portland Group has developed a FORTRAN system that will also interface to GPU hardware calls. **ACTIVITY PROCEEDING.**

AI 09-02: Chuck Hunter indicated that SRNL plans to develop a short White Paper on the evaluation of vector versus scalar wind speed usage as ideas crystallize. **ACTIVITY PROCEEDING.**

AI 09-03: Chuck Hunter detailed the carbon dioxide tracer experiment that SRNL is performing in conjunction with Brookhaven National Laboratory (BNL). Chuck mentioned that one of the nights of sampling did pick up the low level jet and gravity waves that was one of the key objectives of the

program. SRNL is analyzing the tall tower flux covariance data and is waiting for BNL to conclude its tracer gas (fluorinated hydrocarbons) analysis. **ACTIVITY PROCEEDING.**

AI 09-06: The Y-12 wet-bulb globe temperature real-time readings are now accessible through the Y-12 web site. Tom is planning to make a presentation at the October 2009 NUMUG meeting on this topic. The paper will be posted in the near future. **ACTIVITY CAN BE CLOSED.**

AI 09-08: Cliff mentioned that the NRC has issued draft regulatory guide 5022, which will become RG 5.71, on cybersecurity. The process of approval also goes through the Advisory Committee for Reactor Safeguards (ACRS). Cliff will report on this activity at the October 21–23, 2009 NUMUG meeting and will issue a White Paper on this after the ACRS hearings are completed and the regulatory guide is issued. **ACTIVITY PROCEEDING.**

VIII. DMCC Web Page and DMCC Forum Reports

DMCC Web Page: The DMCC web page, upgraded a few months ago as part of a major overhaul of the EMI SIG web site, will retain the main content of each of the EMI SIG group pages.

DMCC Forum: John stated that the DMCC Forum is presently being successfully used for the ANS-2.15 standards writing effort and continues to be available for the membership to post useful information and share ideas.

IX. New Business: Round Robin

Carl led a brief round robin discussion:

EOTA CA Training: Carl shared that the three-day consequence assessment course pilot at LANL on August 18-20, 2009, went very well. It will now be finalized and offered by EOTA at various DOE/NNSA sites. LANL indicated it would sponsor one in Spring 2010.

ORISE: Dorothy stated that next EMI SIG meeting will be held the first week of May 2010 in Las Vegas, NV. An initial call for proposals will be made in October 2009.

DOE/HS-21: Gus Vazquez indicated he will be speaking to his management about co-sponsoring additional Assist Visits since the program is successful.

EP Topical 2011: John Harris reported little activity on the organizing of the topical meeting which will be held in Knoxville, Tenn., August 2011. Carl, as the Technical Program Chair, will be issuing a call for papers soon and will be looking for volunteers to review papers and chair sessions.

Y-12: Tom Bellinger mentioned that Y-12 has purchased a DTN Weather Century contract subscription for communicating weather warnings, which is being used by the Plant Site Superintendent. This replaced the older and less effective satellite package.

ORNL: Kevin Birdwell stated that the ORNL LSS will also be using this package. In addition, he continues to make various improvements to the meteorological program and has completed the modeling case books for Timely Initial Assessments which includes approximately 500 scenarios. He is also getting some push-back on cutting trees that are too close to some of the meteorological towers. One solution is to move the sensor.



X. Next DMCC Conference Call

The next DMCC Conference call is scheduled for **November 17, 2009**. All future 2010 DMCC conference calls will be conducted the third Tuesday of every odd month.

XI. Adjournment

The teleconference was adjourned at **1:28 pm EDT**. Carl thanked everyone for their time and their contributions.

XII. DMCC Program Action Item (AI) Status

Based on the information exchange from the DMCC Meeting and this teleconference, one AI was closed, and no AIs were opened. This number of DMCC AIs is now 9.

The color-coding system used in the teleconference highlights are as follows:

- Existing AIs that are not closed are colored green;
- New AIs are colored yellow; and,
- AIs to be closed are colored blue.

Carl Mazzola will update the DMCC action item list based on the information exchange from this conference call.

Respectfully Submitted,

Carl Mazzola