



Highlights
DMCC Program Teleconference 09-05
Tuesday, December 1, 2009; 12:30–1:30 p.m. EST

Participants

Tom Bellinger, BWXT Y-12
John Ciolek, Alpha-TRAC
Dorothy Cohen, ORISE
Jim Colson, INL
Gerry Gibeault, INL
Cliff Glantz, PNNL

Scot Johnson, LANL
Walt Schalk, ARL/SORD
Lt. Col. Sabrina Tajjeron, OFCM
Gustavo Vazquez, DOE-HS-21
Steve Vigeant, Shaw Environmental

I. Roll Call

Walt Schalk conducted a roll call and acknowledged that 11 individuals involved in the DMCC program were present and the teleconference was called to order.

II. Administrative Matters

A. Previous Teleconference Highlights and Action Items

Walt stated that highlights of the previous teleconference have been developed and have been posted by ORISE on the DMCC portion of the EMI SIG web page, verified by Dorothy Cohen.

B. DMCC Action Item Status

Walt indicated that an updated DMCC Program Action Item (AI) listing was sent out with the agenda. Nine action items were open, and the progress on these AIs will be discussed in today's conference call. The status of the assist visits (AVs) is maintained in a separate portion of that table and these will also be discussed during the teleconference.

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 Mazzola was unavailable to discuss the status of the ongoing DMCC Assist Visit (AV) program, but provided current information after the teleconference.

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. Cliff mentioned that changes are slow to occur at this time due to the uncertainty of where the Met Program will eventually reside. Currently it is on the PNNL side, but there is talk of moving it to the contractor side.

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 met with Matt Parker and Carl Mazzola in Aiken, SC on November 30, 2009 to solicit advice on the implementation of some of the recommendations.

Savannah River National Laboratory (SRNL)

Chuck Hunter continues to address the 11 observations and recommendations, which was well-received by both DOE and SRNL stakeholders. SRNS and DOE top management have reviewed the report which showed a very strong program.

Brookhaven National Laboratory (BNL)

An AV was requested by Joe Terranova and it took place on July 28-29, 2009 with the DMCC AV Team providing 17 observations and recommendations. The draft report was sent on September 30, 2009. BNL has indicated agreement with all recommendations and will be providing minor comments to the report in December 2009. Implementation of some of the recommendations has commenced.

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. Contact has been made with the local contact, Nicholas Bertoldo, to provide information about the DMCC and discuss the possibility of a future AV. A site visit by Walt may be set-up next year.

Idaho National Laboratory (INL)

Kirk Clawson has developed a draft formal response to the 2004 AV, and will request a follow-up assist visit for April 20-21, 2010. Gerry Gibeault reported that they are happy with the progress of the changes suggested in the previous AV, especially in the area of Consequence Assessment Model development.

Los Alamos National Laboratory (LANL)

Scot Johnson recently indicated that he would like to have a follow-up AV in the summer 2010, which will be 4 years since the initial AV. Scot briefed that they are bringing on a new technician next week, which he will be training.

Pantex

Brent Bowen conducted a self-appraisal of the Pantex site in February, 2009. The last AV at Pantex was conducted in April 1997 and that DMCC can augment this self-appraisal, if requested. It was reported by John Ciolek that Brent has left Pantex and that they are again without a meteorologist.

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 will become 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 in RevCom with all comments due on December 18, 2009. Comments will be resolved and this order is expected to be issued in early-2010. Carl Mazzola met with Gus on November 18, 2009 and obtained a copy of the meteorological section of the draft which is under DMCC review.

The revised eleven-chapter 1991-vintage DOE/EH-0173T guidance has been updated to align with the new order and is still being held at HS-20. Once DOE O 458.1 is issued, 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. At that time, Gus will request a DMCC review of Chapter 5 of DOE/EH-0173T since it was prepared back in 2004. **ACTIVITY PROCEEDING.**

AI 08-03: DOE/NNSA Meteorological Program Equipment Survey: John Ciolek indicated that the work on the DOE/NNSA meteorological program equipment survey is being jointly conducted with the Nuclear Utility Meteorological data User Group (NUMUG). John indicated that the survey is small and compact in several segments and easy to fill out in 10-15 minutes and sent out more frequently than annually. John reported that the fourth and final survey relating to met hardware has been completed. Three more mini-surveys will go out beginning in January 2010 to address Standard Operating Procedures, Administration, and Guidance. **ACTIVITY PROCEEDING.**

AI 08-05: DMCC Consequence Assessment Self-Appraisal Guide: Carl met with Dave Freshwater and Jim Fairbent on November 18, 2009, and they indicated that NA-41 comments to the draft DMCC Consequence Assessment Self-Appraisal Guide would be provided shortly. Once the comments are addressed, the guide will be issued to DMCC members for use in self-appraisals. **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 will focus on the most important SQA elements which include configuration management, user's guides and documentation, and adequate verification and validation. Cliff updated the progress of the Consequence Assessment Model SQA Standards. The met data SQA will follow similarly to that of the CAM SQA. Currently, the CAM SQA is rapidly being completed, after receiving comments from the community, including DMCC members, and is going to the technical writing editor on December 4. The next steps are an NA-41 review and a DOE HSS review. Release is expected in early 2010.

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 following presents the status of each of these 8 standards development efforts:

- **ANSI/ANS-2.15, ANSI/ANS-2.16, and ANSI/ANS-3.8.10:** John Ciolek discussed the status of ANSI/ANS-2.15, ANSI/ANS-2.16, and ANSI/ANS-3.8.10, indicating 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 has done a lot of reformatting work and has changed the focus of the standard from descriptive to prescriptive. John set a January 2010 date for the new target for the ANS-2.15 draft to be ready for consensus review. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.21:** Steve Vigeant, Chairman, reported that ANSI/ANS-2.21 has gone through its first ANS review. Comments received included adding more material to the Foreword. Publication is expected in the 1st Quarter of 2010. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.3:** Carl Mazzola reported that the ANSI/ANS-2.3 working group has developed a later draft of ANS-2.3. It is targeted for issuance in February 2010. This standard will support Natural Phenomena Hazard (NPH) DOE guides and standards. Carl sent a copy of the latest draft to Chuck Hunter for his review. **ACTIVITY PROCEEDING.**
- **ANSI/ANS-2.31:** A Project Initiation and Notification System form has been 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 five-year sunset. The Committee discussed that the standard should be reviewed in the next cycle. **ACTIVITY PROCEEDING.**

- **ANSI/ANS-58.25:** Carl reported on the standard associated with Level III probabilistic risk assessments. It addresses both meteorological data (Section 4.7) and atmospheric transport and diffusion models (Section 4.8) for risk-informed safety evaluations. Carl met with the Working Group in Atlanta, GA in June 2009 alongside the Annual ANS Meeting. A draft was sent to RISC for consensus review in October 2009. **ACTIVITY PROCEEDING.**

VII. NNSA/DOE Site Initiatives

AI 09-01: John Ciolek reported that NCAR continues to develop the WRF model on Graphical Processing Unit (GPU) hardware. The GPU programming language is a special form of C code of which the Fortran code needs to be converted to. John mentioned that 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. A recent WRF Users Group Conference produced several good papers on the GPU topic. John provided information that NVIDIA (a GPU manufacturer) is developing a new GPU architecture that is focused on the high performance computing environment. Advances include 64-bit double precision floating point calculations, speeding up the memory, and being able to pass multiple instructions to the GPU processors at one time. **ACTIVITY PROCEEDING.**

AI 09-02: At the last teleconference, 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. No further discussion during this teleconference. **ACTIVITY PROCEEDING.**

AI 09-03: At the last teleconference, Chuck Hunter discussed some of the details about the carbon dioxide tracer experiment that SRNL is performing in conjunction with Brookhaven National Laboratory (BNL) and 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. No further discussion during this teleconference. **ACTIVITY PROCEEDING.**

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 reported on this activity at the October 21-23, 2009 NUMUG meeting. Cliff reported that the NRC has not released the document and the new expected date is at the end of December. Cliff 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: Dorothy briefed that the EMI SIG web site will be undergoing an update in January. The latest Teleconference notes have been posted. Dorothy also issued a request to the group for picture and graphics to be posted on the website. Currently, very few have been received, so send them in.



DMCC Forum: John Ciolek reported that the Forum has been down for a couple months. Work is being done to restore it soon and should be back on-line in a week or so. The Forum continues to be available for the membership to post useful information and share ideas.

IX. New Business: Round Robin

Walt led a brief round robin discussion:

Walt discussed EMI-SIG Conference May 2010, Las Vegas, NV

Cliff reported that it was suggested that the SCAPA meeting be moved to Monday afternoon of Conference week. The DMCC meeting is currently scheduled for Monday morning. All subcommittees are being encouraged to focus their meetings. Dorothy also reminded us that the Call for Abstracts is out and that they are due on January 7. This year is being organized a bit different in that presentations for the subcommittee meetings are also being required to submit abstracts by the January 7 deadline.

X. Next DMCC Conference Call

The next DMCC Conference call is scheduled for **January 19, 2010**. All future 2010 DMCC conference calls will be conducted the third Tuesday of every odd month.

XI. Adjournment

The teleconference was adjourned at **1:31 p.m. EST**. Walt 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, no AIs were closed, and no AIs were opened. This number of DMCC AIs stays at nine.

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