

## WM2008 Conference Panel Reports

### Session 60

#### **Panel: Identifying and Overcoming Barriers to Developing and Application of New D&D Technologies**

Panel Reporters: John McFee; Grand Lake Consulting LLC and Andrew Szilagyi; US DOE

The purpose of the panel was to identify the barriers to the insertion of new, innovative, and/or applied technologies to D&D projects and to develop approaches to overcoming the identified barriers that would result in implementation of cost and risk reducing technologies in DOE D&D projects.

The following panelists participated:

- Ms. Yvette Collazo, Director, Office of D&D and Facility Engineering, Office of Engineering and Technology
- Mr. Gerald Boyd, Manager, US DOE Oak Ridge Office,
- Mr. Richard Messervey, Consulting Engineer, Idaho National Laboratory
- Dr. Laurie Judd, Vice President, Federal Programs, NuVision Engineering
- Mr. Wayne Norton, President & CEO of Connecticut Yankee and Yankee Atomic

DOE Headquarters, EM- 23 perspective – Ms. Yvette Collazo identified that DOE still has a great deal of D&D to perform, in excess of \$20 Billion, and she believes that available and developing technologies can provide DOE considerable savings and/or smarter/safer way to conduct D&D. However, there are several impediments to implementation of those technologies. They include the belief and behavior that:

- D&D is “not rocket science” and therefore can be done with existing “low tech” approaches. While this is generally true, the appropriate application of innovative technologies would allow D&D to be conducted faster, cheaper, and safer.
- D&D managers tend to use known and tried technologies that give them a high “comfort factor”.
- There is a disconnect between technology planners and developers and the D&D contractors (technology users). Additionally, there is a disconnect between the schedules for the identification of technology needs/technology development, and project planning and implementation.
- DOE is not providing incentives or relief for risk for trying innovative methods that could result in potential savings.

In response to these issues, DOE conducted a number of workshops for technology users and has developed a multi-year program plan and technology development roadmap. One of the identified initiatives is an EM 2008 Technology Tool Box.

Site Manager Perspective – Mr. Gerald Boyd, current DOE Oak Ridge Office manager and past manager of EM-50 is a strong proponent of innovative technologies. He believes that DOE’s recent successes at Rocky Flats and Fernald are a direct result of the development and implementation of innovative technologies. He specifically cited development in characterization technologies and improved fate & transport modeling as implemented at Oak Ridge. He believes the #1 D&D problem is the lack of urgency. Without urgency, the

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technology needs don't attract dollars in the near term which precludes their availability when needed.

Site D&D Manager perspective – Mr. Dick Meservey provided a history of D&D technology development and referred to the recent past as the “Technology Development Dark Ages.” He also believes that D&D technology development is regarded as “low tech” and therefore not very attractive. In addition, D&D planners are frequently unaware of new technologies. A centralized technology databank would be helpful in overcoming this problem. The databank or clearinghouse would help communicate the successes and enhance implementation of cost and risk reducing technologies.

Technology providers' perspective – Dr. Laurie Judd described two tank draining technology successes at Oak Ridge. He cited substantial cost savings to DOE. He commented that technology developers must consider the safety analysis implications on DOE sites. He also supported the previous speakers concern about the need for communicating/marketing the technology successes. Some specific suggestions include:

- Providing an innovation budget to projects;
- Providing royalties to sites demonstrating the technologies;
- Identifying and supporting stand-alone projects for new technologies; and
- Support to technology advocates in DOE.

He specifically cited the prior DOE ASTD and LSDDP programs as models.

Commercial project D&D perspective – Mr. Wayne Norton managed both Maine Yankee and Connecticut Yankee power reactor D&D projects. He indicated that the commercial sector watches DOE technology demonstrations as predecessors for their implementation. He strongly cautioned attendees to maintain awareness that schedule drives costs. Schedule reduction is a cost reduction.