

WM2013 Conference Panel Report

PANEL SESSION 32: US DOE Support for Fukushima Cleanup Efforts

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Panelists:

1. **Steve Schneider**, *Director for Tank Waste Management, US DOE Office of Environmental Management*
2. **Sal Golub**, *Associate Deputy Assistant Secretary for Nuclear Reactor Technology, US DOE Office of Nuclear Energy*
3. **Danius Barzdukas**, *Office of Japan, Korea and Taiwan, US Department of Commerce*

About 50 people attended this panel session which focused on US DOE's continuing support for Fukushima cleanup efforts. The session opened with three panelists presenting an up to date overview of the efforts to support the Government of Japan in addressing Fukushima Daiichi decommissioning and environmental remediation activities. This was followed by a question and answer session which included questions on the future of the cleanup efforts, priorities and projects to improve nuclear safety, and methods to assist US firms get involve.

Summary of Presentations

Steve Schneider explained that Japan requested assistance with the cleanup efforts at Fukushima because of EM's extensive experience. He gave the status of the assistance provided to Japan to date including two EM-led cleanup workshops with Japan. The first workshop held in October 2011 in Tokyo, Japan was arranged in collaboration with the Ministry of Economy, Trade, and Industry (METI). This first workshop discussed the cleanup of the Fukushima reactor site. The second workshop held in February 2012 at Hanford was arranged in collaboration with the Japan Ministry of Environment (MOE). The second workshop discussed offsite cleanup and was followed by a tour of Hanford site. In addition, **Steve** went over the support provided by EM to the Department of Commerce to create an opportunity for US companies to support cleanup efforts in Fukushima. Due to this effort, over 30 US companies visited Japan in June 2012. He highlighted that the support from the US Embassy in Japan was key to the success of these activities. The Bilateral Commission for Nuclear Energy Cooperation was also covered, where EM leads the Decommissioning and Environmental Management Working Group along with the Environmental Protection Agency (EPA). Said Working Group focuses on bilateral cooperation to address the long-term consequences of the Fukushima accident, including lessons learned related to facility decommissioning, spent fuel storage and decontamination, and managing the longer term consequences of a nuclear incident, such as monitoring and remediating contaminated areas. **Steve** mentioned that among the future plans for continuing cooperation is to provide technical assistance through the third joint US - Japan cleanup workshop currently in planning stages.

Sal Golub covered the cooperation with Japan regarding nuclear energy following the Fukushima Daiichi accident. He explained that Japan has a robust civil nuclear energy industry

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with mature programs in advanced reactor and fuel cycle research and development. DOE-NE initiated and reoriented a number of research activities in view of the Fukushima Daiichi accident. For example joint research activities with the Nuclear Regulatory Commission (NRC) are now geared to a testing program to better understand the performance characteristics of nuclear plant emergency battery systems during severe accident conditions. Also, University led research activities now mainly focus on accident tolerant fuels. **Sal** mentioned that his office is involved in international cooperation through the Organization for Economic Co-operation and Development (OECD)/Nuclear Energy Agency (NEA) Fukushima Benchmarking Project. The project recently initiated a Fukushima Daiichi analysis and benchmarking project that DOE and NRC support. The results of this effort could potentially guide defueling of Fukushima Daiichi plant. Finally **Sal** mentioned that DOE will continue to partner with and actively support Japan and reaffirmed that the Bilateral Commission will facilitate cooperative efforts in nuclear energy, safety, security, nonproliferation and environmental management.

Danius Barzdukas from the Office of Japan, Korea and Taiwan at the Department of Commerce covered the work he had done along with the Departments of Energy and the State Department to help organize a trip by US firms to Tokyo and Fukushima in June of 2012. He provided a general outline of how the clean-up of Fukushima prefecture is progressing. He also provided a brief update of what the United States is doing to assist with decontamination efforts that have been planned. Finally, he gave the Department of Commerce's perspective on the challenges with working in Japan. **Danius** highlighted opportunities for US firms in areas such as: 1) Finding more efficient/effective technology for decontamination from the perspective of cost, time, etc through demonstration projects and R&D (including Soil/Waste minimization and volume reduction); 2) Public communications for securing storage sites or facilities; 3) Research on cesium. He provided contact points for US Export Assistance Centers and referred to the website of Commercial Service Tokyo for information. He offered to include any interested private industry on a mailing list where he sends out information to those who were on the June trip.

Questions and Answers

A question began by mentioning that it has been 2 years since the Fukushima Nuclear disaster. All panel members were asked their personal perspective on how would they like to see things 2 years from now with respect to Fukushima.

Steve Schneider responded that he would like to see a cooperative plan in place and have a well functioning relationship with Japanese counterparts at all levels, including contracts for US businesses and National Laboratories to share their capabilities with the Japanese community. In addition, he hopes that in 2 years there would be a structure in place to facilitate these interactions.

Sal Golub responded that it would be beneficial if in 2 years there was a set of priorities and projects in place to improve nuclear safety. Also, he hopes that program budget would become available for improving nuclear safety in the Department. Also, he would like to see consolidated efforts geared towards pursuing these types of improvements.

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Danius Barzdukas would like firms to become more familiar with the business structures in Japan and develop a smooth method to assist US firms get involved in the cleanup of Fukushima at every area of Fukushima. Also he would like to see developed a possible business to business working group where information can be shared and some of the developed expertise from Japan can be used in the US.