Dr. Michaele Brady Raap



Vice-President/ President Elect American Nuclear Society

Chief Engineer with Nuclear Systems Design, Engineering & Analysis Group within The National Security Directorate at the Pacific Northwest National Laboratory (PNNL)

Thursday, May 15, 2014 - Dominion Innsbrook Technical Center, Glen Allen, VA at 5:30 PM

Fukushima Remediation Efforts by Pacific Northwest National Laboratory, Savannah River National Laboratory, and TEPCO

The presentation will discuss the ongoing remediation activities at Fukushima and contributions from the US DOE National Laboratories. Following the events at the Fukushima Daiichi Nuclear Power Station resulting from the earthquake and tsunami on March 11, 2011, Japan proceeded quickly from emergency response measures to recovery and restoration of the site. The Savannah River National Laboratory (SRNL) and Pacific Northwest National Laboratory (PNNL) have a contractual agreement with Tokyo Electric Power Company (TEPCO) to provide technical assistance for the remediation of TEPCO's Fukushima Daiichi Nuclear Power Station. SRNL and PNNL have developed a broad array of capabilities in science and technology, and have significant experience in developing and successfully deploying technologies to support complex, long-term environmental remediation and decommissioning at major nuclear facilities in the United States. The two National Laboratories have been working to integrate the best capabilities and knowledge to address the challenges at Fukushima. The SRNL and PNNL integrated technical team was asked to address specific areas of interest identified by TEPCO. These challenges include underground water contamination monitoring, waste

treatment/disposal, fuel debris container and storage, water treatment and the revitalization of the local communities.

Speaker Biography:

Dr. Michaele (Mikey) Brady Raap is a chief engineer with the Nuclear Systems Design, Engineering & Analysis Group within the National Security Directorate at the Pacific Northwest National Laboratory (PNNL) in Richland, Washington. She has more than 25 years of experience in nuclear and criticality safety for plutonium processing and spent fuel systems including the design and review of benchmark experiments, safety assessments at operating facilities and integrating safety-in-design.

Dr. Brady Raap has had extensive involvement with international and national nuclear organizations. She has been the Chair of the Organization for Economic Cooperation and Development (OECD / NEA) Nuclear Energy Agency, Expert Group on Burnup Credit Criticality for over 20 years. She has been a key contributor to Technical Coordination Meetings organized by the International Atomic Energy Agency (IAEA) related to burnup credit. Dr. Brady Raap is an active member of multiple American National Standards Institute / American Nuclear Society (ANSI/ANS) Working Groups and in International Standards Organization (ISO) standards development activities. She is currently the chairman of the OECD/NEA Working Party on Nuclear Criticality Safety (WPNCS) and a member of the DOE Nuclear Criticality Safety Support Group (CSSG).

Dr. Brady Raap has been an active member of the American Nuclear Society (ANS) since joining in 1985 and has held many leadership positions for ANS including the chairmanship of both the Reactor Physics and Nuclear Criticality Safety Divisions. She has served two terms on the ANS Board of Directors and as the Treasurer (2011-2013). Dr. Brady Raap currently the Vice-President/President-Elect (2013-2014) and will assume the role of President of the ANS in June 2014.

Prior to joining PNNL in 1999, she was with Duke Engineering Services Incorporated, Oak Ridge National Laboratory, and Sandia National Laboratories. She performed her dissertation research at Los Alamos National Laboratory. Dr. Brady Raap received her BS, MS and PhD in Nuclear Engineering from Texas A&M University.

Schedule:

- Social Hour 5:30 p.m.
- Dinner 6:00 p.m.
- Presentation 6:45 p.m.
- Adjourn 8:00 p.m.
- Directions to the Dominion Innsbrook Technical Center

COST: \$20 (\$10 for students) includes dinner. Reservations for the meeting will close as of 4 p.m. on Monday, May 12, 2014. Please address any questions to Brian Vitiello.