

## **Panel 3 Biographies**

### **Michael Waters**

Mr. Waters is currently the Chief of the Licensing Branch in the Division of Spent Fuel Storage and Transportation within the Office of Nuclear Materials Safety and Safeguards of the U.S. Nuclear Regulatory Commission. Prior to his current position, he was the Chief of the Thermal and Containment Branch in SFST. He has over 15 years of experience at the NRC, and has spent several years in the regulatory oversight of spent nuclear fuel and radioactive materials transportation packages. Mr. Waters holds a Masters of Nuclear Engineering Sciences degree from the University of Florida.

### **Dr. Albert Machiels**

Dr. Albert Machiels is a Senior Technical Executive at the Electric Power Research Institute (EPRI), where he is responsible for providing technical expertise on topics related to used fuel management and advanced fuel cycles. Dr. Machiels has over 40 years of involvement in various fields of nuclear technology R&D, including faculty and program director positions at several universities and with EPRI.

### **Dr. Robert Einziger**

Dr. Einziger is a Senior Materials Scientist in the Structural, Mechanics, and Materials Branch of the Spent Fuel Storage and Transportation Division of the US NRC. He is responsible for evaluation and guidance on fuels performance during storage and transportation. In that role, he authored ISG-22 and ISG-1 Rev 2 on damaged fuel. Currently he is working on the technical issues associated with Extended Storage and Transportation. He is particularly interests in a high burnup demonstration program. In addition, he has chaired or participated on a number of IAEA Consultancies including SPAR-III and the EST Cooperative Research Program.

Prior to joining the NRC, he was manager of the Materials Performance Department in the Chemical Technology Division at Argonne, and manager of the Materials Application Section at the Pacific Northwest National Laboratory. In these positions, he guided work in fracture and fatigue, actinide separations, waste form performance and spent fuel behavior. He managed hot cell facilities at both the ANL and PNNL. Dr. Einziger has worked on fuel and cladding issues related to spent fuel storage and transportation since 1979. His research interests are spent fuel oxidation, whole rod behavior and source term development. He is a Fellow of the ANS, and recipient of the ANS Mishma Award for contributions to nuclear fuels development.

### **Dr. Zhian Li**

Dr. Zhian Li is a Senior Criticality and Shielding Engineer in the Criticality, Shielding, and Dose Assessment Branch within the Division of Spent Storage and Transportation, Office of Nuclear Material Safety and Safeguards. He has a PhD in Nuclear Engineering with emphasis in nuclear reactor physics and reload design optimization. He joined the NRC in 2006. Prior to joining NRC, he worked at Argonne National Laboratory in areas of Safety Analysis for Radioactive material Package (SARP) review, reactor licensing renewal, and modeling and simulation development for ecological systems.

### **Prakash Narayanan**

Prakash Narayanan currently works as the Deputy Director of Design Engineering at Transnuclear Inc (TN), An AREVA Company. He currently works on Criticality, Source Terms, Shielding, and Dose Assessments for TN Dry Storage and Transportation Systems. Mr. Narayanan has been with TN since August 2001 and prior to joining TN, worked for Combustion Engineering for two years primarily on Spent Fuel Pool Criticality. Prakash holds a Master's degree in Nuclear Engineering from North Carolina State University.