

## TH32 Spent Nuclear Fuel Criticality Analysis Issues

The purpose of this session is to allow the USNRC to update the industry on the issues and progress on efforts to establish new and/or revised guidance related to spent nuclear fuel (SNF) currently stored in spent fuel pools (SFP) and storage canisters in anticipation of shipment off site for ultimate disposition. During the past several years the USNRC has noticed significant issues with the quality of SFP criticality analyses that take burn-up credit (BUC). Additionally, there have been several instances of unexpected degradation of SFP neutron absorbers. NRR, NRO, and NMSS are working together to reach as much commonality as possible in the resolution of these issues.

**Session Chair:** Sher Bahadur, Director, Division of Safety Systems, NRC/NRR

### Speakers/Panelists:

Regulatory Reviews of Criticality Safety Systems for New Generation of Storage Casks and Transportation Packages

*Presentation View*

*Handout View*

*Meraj Rahimi, Senior Project Manager, NRC/NMSS*

Neutron Absorbing Materials in the Spent Fuel Pool

*Presentation View*

*Handout View*

*Emma Wong, Chemical Engineer, NRC/NRR*

Correct Implementation of a Depletion Uncertainty

*Presentation View*

*Handout View*

*Dale Lancaster, Consultant, NuclearConsultants.com*

NRC Research in Support of Burnup Credit Regulatory Guidance

*Presentation View*

*Handout View*

*John Wagner, Technical Integrator, Nuclear Modeling, Design, and Safety, Oak Ridge National Laboratory*

Industry Perspectives on Spent Fuel Pool Criticality Evaluations - Issues and Recent Developments

*Presentation View*

*Handout View*

*Everett Redmond II, Senior Project Manager, Used Fuel Storage and Transportation, Nuclear Energy Institute*

SFP Criticality Analysis: Regulatory Path Forward  
*Presentation View*                      *Handout View*

*Kent Wood, Reactor Systems Engineer, NRC/NRR*

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