Summer 2009, Atlanta, Georgia

Technical Sessions

Listed below are the sessions and papers that were presented at the meeting.

Advances in Nuclear Criticality Accident Excursion Analysis

- **Criticality Accident Analysis: Does Your Facility's Accident Have a Justified Basis?**, Thomas P. McLaughlin (Consultant)
- **Is 12 "Rad in Air" an Appropriate Quantity for Excessive Dose?**, Peter L. Angelo, Ken G. Veinot (Y-12 NSC)
- **Criticality Accident Analysis for INL Shielded Hot Cells**, Wade Scates (INL)
- **Derivation of 2-D Thermoelastic Equations of Motion for a Finite Cylinder**, Travis Grove, Robert Kimpland, William Myers (LANL)

Integration of Nuclear Criticality Safety into New Facility Design

- **Criticality Safety Refinement at the MOX Fuel Fabrication Facility**, James J. Bazley, Michael J. Shea, Robert G. Foster (Shaw AREVA MOX Services, LLC)
- **Integrating Criticality Safety into Design of 233U Downblending Process**, Karla R. Elam, Linda L. Gilpin (SpectraTech Inc), Billy W. Starnes (Strata-G)
- **An Estimate of Minimum Critical Water Content for 10% Enriched UF6 in 30-inch and 48-inch Diameter UF6 Cylinders**, Lon E. Paulson, James. F. Degolyer (GE-Hitachi Nuclear Energy)
- **Integration of NCS into the CMRR Nuclear Facility**, Douglas G. Bowen (LANL)

Data, Analysis, and Operations for Nuclear Criticality Safety-I

- **Analysis of Enriched Uranyl Nitrate in Nested Annular Tank Array**, John D. Bess, James D. Cleaver (INL)
- **PARANAL: An Efficient Tool for Parametric Analysis of Criticality Safety**, Qi Ao (GE-Hitachi Nuclear Energy)

Data, Analysis, and Operations for Nuclear Criticality Safety-II
Use of List-Mode Data Acquisition Systems for Performing Benchmark Subcritical Neutron Measurements, William L. Myers, Gaetano J. Arnone, Sheila G. Melton (LANL)

Analysis of a Reflected Alpha-Phase Plutonium Sphere, J. Hutchinson, W. Myers, R. Sanchez (LANL)

Achieving Criticality Safety Defense-in-Depth Using Reliability Analysis with Augmented Correlation Analysis, Burton Rothleder (DOE)

Methodology for Validating Minor Actinide Fission Cross Sections, C. van der Hoeven, E. Schneider (Univ of Texas, Austin)

Investigation of Absorber Materials in Water-Reflected Systems, J. Hutchinson, R. Paternoster (LANL)

Single Parameter Control: Does It Impact Safety?, J. J. Lichtenwalter (Y-12 NSC), Jeff Castor (Bechtel Jacobs), Clinton Gross (Paschal Solutions)

**Nuclear Criticality Safety Staff and Operations Interface**

Development of the Criticality Safety Officer Program at Rocky Flats, Robert E. Wilson (DOE)

How Criticality Safety Staff Operational Relationships Affect Inspection Focus at NRC Licensed Fuel Cycle Facilities, Dennis C. Morey, Thomas J. Marenchin (NRC)

K-25/K-27 D&D Project Criticality Safety Officer Program, Roger W. Bartholomay, Thomas J. Rankin (Washington SMS), Samy Hanna (eProject)

Criticality Safety Officer Training at the K-25/K-27 D&D Project, R. W. Carson, Jr. (NISYS), Michael J. Crouse (URS - Washington Division)

Implementation of Criticality Controls in the KIS Facility at SRS, Marc L. Nadeau, Jagdish N. Joshi (Savannah River Site)

Criticality Safety Officer Functions and Applications, Mark A. Joseph (B&W Y12)

Nuclear Criticality Safety and Operations Interface at LLNL, John S. Pearson (LLNL)

The LANL Criticality Safety Officer Program, Douglas G. Bowen (LANL)