

Winter 2008, Reno, Nevada

Technical Sessions

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

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

[Absorption of Water into Uranium Powder and Implications to Nuclear Criticality Safety](#), Jerry Lichtenwalter (*B&W Y-12 Technical Svc*)

[Updated Plutonium-Solution Temperature-Coefficient Calculations](#), Drew Kornreich (*LANL*)

[Revisiting the "Provost k-Infinity Curves,"](#) Drew E. Kornreich, Arthur R. Pan, Douglas G. Bowen, Norman L. Pruvost (*LANL*)

[Criticality Safety Regulation: The Pendulum Has Swung Too Far](#), Thomas Patrick McLaughlin (*Consultant*)

[Subcritical Measurements of a Plutonium Sphere with Various Reflectors](#), Jesson Hutchinson (*Georgia Tech*)

A Dynamic Simulation Tool for Critical Assemblies Using the Coupled Neutronic-Thermoelastic Method, Travis Grove, Robert Kimpland, William L. Myers (*LANL*)

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

The TWPC Graded-Approach to Nuclear Criticality Safety, Kevin Kimball (*NISYS Corp*)

Criticality Frequency Analysis for De-Inventory of Lawrence Livermore National Laboratory's Special Nuclear Materials to Savannah River Site, Debdas Biswas, David Riley, Karen Dodson (*LLNL*)

Approach for Nuclear Criticality Safety During Demolition of the K-25 Building, John Chandler (*ACTS of South Carolina*), Roger W. Bartholomay (*WSMS*)

[Subcritical Measurements Multiple HEU Metal Castings](#), John Mihalczko (*ORNL*)

[Using Cross-Section Uncertainty Data to Estimate Biases](#), Donald Mueller, Bradley T. Rearden (*ORNL*)

[Designing Critical Experiments in Support of Full Burnup Credit](#), Jeremy A. Roberts (*Univ of Wisconsin, Madison*), Donald Mueller (*ORNL*)

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

[MCNP5 Criticality Benchmarking Using ENDF/B-VII.0 for LEU Systems](#), John Hannah, Qi Ao, John Zino (*GE-Hitachi Nuclear Energy*)

[Efforts to Eliminate Raschig Ring Filled Vessels at B&W](#), Ron J. Green (*Babcock and Wilcox NOG-L*)

[Variation of Extrapolation Distance with U-235 Concentration](#), Allison Miller, Robert D. Busch (*Univ of New Mexico*)

[The Quantitative Relevance of Correlation to the Independence Aspect of the Double Contingency Principle](#), Burton Rothleder (*DOE*)

[Performance of the New Continuous Energy Capability in KENO V.a](#), Sedat Goluoglu (*ORNL*)

Parametric Studies for Nuclear Criticality Safety Using Microsoft Excel, Michael J. Crouse, Steve Van Volkinburg (*NISYS Corp*) **(Not Presented at the Meeting)**

Recent Nuclear Criticality Safety-Related Events and Associated Lessons Learned

[Criticality Safety Issued Related to Use of Raschig Rings at B&W](#), Larry L. Wetzel (*B&W Nuclear Operations Group*)

[Plants Changes Effecting Criticality Alarm Exemptions at NRC Licensees](#), Thomas J. Marenchin, Dennis Morey (*U.S. NRC*)

[Importance of Criticality Safety Staff Monitoring and Reviewing Procedures Used to Perform Fissile Material Operations at NRC Licensees](#), Thomas J. Marenchin, Dennis Morey (*U.S. NRC*)

[Nuclear Criticality Safety Lessons Learned at Los Alamos National Laboratory](#), Douglas G. Bowen, Shean P. Monahan (*LANL*), Patrick Moss, Jerry Hicks (*U.S. DOE/NNSA*)

[March 6, 2006 Spill Event at Nuclear Fuel Services](#), Randy Shackelford (*Nuclear Fuel Services, Inc.*)

Nuclear Criticality Safety Standards Poster Session

[Remembering Dave Smith](#)

ANSI/ANS-8.1: Nuclear Criticality Safety in Operations with Fissile Material Outside Reactors, Douglas G. Bowen (*LANL*), Nicholas Brown (*Nuclear Fuel Services*)

[Poster 1](#), [Poster 2](#), [Poster 3](#)

Overview of the Raschig Ring Standard, ANSI/ANS 8.5, Jerry Hicks (*U.S. DOE NNSA*)

[ANSI/ANS 8.6 American National Standard for Safety in Conducting Subcritical Neutron Multiplication Measurements in Situ](#), William L. Myers (*LANL*)

[Guide for Nuclear Criticality Safety in the Storage of Fissile Materials](#), Kevin Kimball (*NISYS Corp*), Calvin M. Hopper (*ORNL*)

[ANSI/ANS 8.12, Nuclear Criticality Control and Safety of Plutonium- Uranium Fuel Mixtures Outside Reactors](#), Debdas Biswas (*LLNL*), Dennis Mennerdahl (*E M Systems*)

[ANSI/ANS-8.15: Nuclear Criticality Control of Selected Actinide Nuclides](#), Charles Rombough (*CTR Technical Services*)

[Administrative Practices for Nuclear Criticality Safety](#), Royal W. Carson Jr. (*NISYS Corp*)

[ANS-8.20-1991 - Nuclear Criticality Safety Training](#), Ronald A. Knief (*XE Corp*), A. Nichole Ellis (*Ellis Nuclear Engineering*)

[ANSI/ANS-8.21: Use of Fixed Absorbers in Nuclear Facilities Outside Reactors Poster Session](#), Hans Toffer (*Consultant*), David Erickson (*FluorGovernment Group*)

Nuclear Criticality Safety Based on Limiting and Controlling Moderators - ANSI/ANS-8.22, Michael J. Crouse (*URS - Washington Division*)

[ANSI/ANS-8.23-2007: Nuclear Criticality Accident Emergency](#), James Baker (*LANL*)

[ANSI/ANS 8.24 - Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations](#), Robert D. Busch (*Univ of New Mexico*)

ANSI/ANS-8.25-200X: Development of Nuclear Criticality Safety Related Postings Proposed Standard, Gerard F. Couture (*Westinghouse*)

[Criticality Safety Engineer Training and Qualification Program - ANSI/ANS-8.26](#), James Morman (*ANL*)