

## MICHAEL E. DUNN

### SELECTED PUBLICATIONS

#### 1994

1. C. Bentley, B. Basoglu, **M. Dunn**, M. Plaster, A. Ruggles, A. Wilkinson, T. Yamamoto, H. Dodds, "Shutdown Mechanisms for a Hypothetical Criticality Accident Involving HEU Powder," *Trans. Am. Nucl. Soc.*, **70**, 188 (June 1994).
2. **M. E. Dunn**, B. Basoglu, C. L. Bentley, C. Haught, M. J. Plaster, A. D. Wilkinson, T. Yamamoto, H. L. Dodds, "Validation of KENO V.a with ENDF/B-V Cross Sections for U-233 Systems," *Trans. Am. Nucl. Soc.*, **70**, 181 (June 1994).
3. M. J. Plaster, B. Basoglu, C. L. Bentley, **M. E. Dunn**, A. E. Ruggles, A. Wilkinson, T. Yamamoto, H. L. Dodds, "Analysis of a Hypothetical Criticality Accident in a Waste Supercompactor," *Trans. Am. Nucl. Soc.*, **70**, 189 (June 1994).
4. **Michael E. Dunn**, "Nuclear Criticality Safety Evaluation of the U-233 Inventory at the Oak Ridge National Laboratory Using ENDF/B-V Cross Sections," M.S. Thesis, The University of Tennessee, Knoxville (August 1994).
5. **M. E. Dunn**, B. Basoglu, C. L. Bentley, S. Goluoglu, C. Haught, M. J. Plaster, A. D. Wilkinson, T. Yamamoto, H. L. Dodds, "Nuclear Criticality Safety Evaluation of U-233 Storage Configurations Using ENDF/B-V Cross Sections," *Trans. Am. Nucl. Soc.*, **71**, 278 (November 1994).

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6. **M. E. Dunn**, B. Basoglu, C. L. Bentley, S. Goluoglu, C. Haught, M. J. Plaster, A. D. Wilkinson, T. Yamamoto, H. L. Dodds, "Validation of KENO V.a with ENDF/B-V Cross Sections for U-233 Systems," *Nucl. Tech.*, **111**(2), 183-196 (August 1995).
7. M. J. Plaster, B. Basoglu, C. L. Bentley, **M. E. Dunn**, S. Goluoglu, C. Haught, A. D. Wilkinson, T. Yamamoto, H. L. Dodds, "Analysis of a Hypothetical Criticality Accident in a Waste Supercompactor," *Nucl. Tech.*, **111**(2), 219-226 (August 1995).
8. A. D. Wilkinson, B. Basoglu, C. L. Bentley, **M. E. Dunn**, S. Goluoglu, C. Haught, M. J. Plaster, T. Yamamoto, H. L. Dodds, "Improved Dose Estimates for Nuclear Criticality Accidents: Preliminary Results," Technical Note *Nucl. Tech.*, **111**(2), 227-240 (August 1995).

9. B. Basoglu, C. L. Bentley, **M. E. Dunn**, S. Goluoglu, L. Paschal, H. L. Dodds, "Evaluation of Several Parallel Algorithms for KENO-V.a," *Trans. Am. Nucl. Soc.*, **73**, 183 (October 1995).
10. **M. E. Dunn**, C. L. Bentley and J. K. Mattingly, "Time-Frequency Analysis of Electric Motors," *Trans. Am. Nucl. Soc.*, **73**, 310 (October 1995).

### **1996**

11. **M. E. Dunn**, C. L. Bentley, S. Goluoglu, L. S. Paschal, R. E. Pevey, H. L. Dodds, L. M. Petrie, "Development of a Continuous Energy Version of KENO V.a," *Trans. Am. Nucl. Soc.*, **74**, 230 (June 1996).
12. **Michael E. Dunn**, "Development of a Continuous Energy Version of the Monte Carlo Code KENO V.a," Ph.D. Dissertation, The University of Tennessee, Knoxville (December 1996).

### **1997**

13. **M. E. Dunn**, C. L. Bentley, S. Goluoglu, R. E. Pevey, H. L. Dodds and L. M. Petrie, "Continuous Energy Methods Development for the Monte Carlo KENO V.a," *Trans. Am. Nucl. Soc.*, **76** (June 1997).
14. **M. E. Dunn**, C. L. Bentley, S. Goluoglu, L. S. Paschal, R. E. Pevey, H. L. Dodds and L. M. Petrie, "Development of a Continuous Energy Version of KENO V.a," *Nucl. Tech.* **119(3)**, 306-313 (September 1997).

### **1998**

15. **M. E. Dunn**, *Production of MCNP Cross Sections Using the AMPX and NJOY Processing Code Systems*, ORNL/M-6609 (Letter Report), October 1998.

### **1999**

16. **M. E. Dunn**, N. M. Greene, *Testing of Multi-pole Formalism and POLIDENT Continuous Energy Cross-Section Data for Criticality Safety Applications*, ORNL/NRC/LTR-99/9, Lockheed Martin Energy Research Corp., Oak Ridge National Laboratory, May 1999.  
[Task 11 Milestone Report for W6479]

17. **M. E. Dunn**, P. B. Fox, *Criticality Safety Scoping Study for the Transport of Weapons Grade Mixed Oxide Fuel Using the MO-1 Shipping Package*, ORNL/TM-13741, Lockheed Martin Energy Research Corp., Oak Ridge National Laboratory, May 1999.
18. **M. E. Dunn**, N. M. Greene, L. C. Leal, "Energy Meshing Techniques for Processing ENDF/B-VI Cross Sections Using the AMPX Code System," *Trans. Am. Nucl. Soc.*, **80**, 140-142 (1999).  
**American Nuclear Society, 1999 Annual Meeting, Boston, Massachusetts, June 6-10, 1999.**
19. **M. E. Dunn**, N. M. Greene, and D. F. Hollenbach, "Development and Testing of a New AMPX Cross Section Processing System for Criticality Safety Applications," in *Proc. American Nuclear Society 1999 Winter Meeting and Embedded Topical Meetings*, November 14-18, 1999, Long Beach, California. *Trans. Am. Nucl. Soc.*, **81**, 160-161 (1999).

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20. **M. E. Dunn**, B. L. Broadhead, "PUFF-III: A Multigroup Covariance Processing Code for the AMPX Cross Section Processing System," 156.pdf (11404) in *Proceedings of the PHYSOR 2000, ANS International Topical Meeting on Advances in Reactor Physics and Mathematics and Computation into the Next Millennium*, May 7-12, 2000, Westin William Penn Hotel, Pittsburgh, Pennsylvania, USA. ISBN: 0-89448-655-1; ANS Order No. 2700281 (May 2000).
21. **M. E. Dunn**, *PUFF-III: A Code for Processing ENDF Uncertainty Data Into Multigroup Covariance Matrices*, NUREG/CR-6650 (ORNL/TM-1999/235), U.S. Nuclear Regulatory Commission, Oak Ridge National Laboratory, in press 2000.