

Nuclear Technology

VOLUME 193 · NUMBER 1 · JANUARY 2016
Special Issue on the RELAP5 Computer Code

Contents

- iii Foreword
G. L. Mesina

TECHNICAL PAPERS

- 1 Validation of a Three-Dimensional Model of EBR-II and Assessment of RELAP5-3D Based on SHRT-17 Test
Alessandro Del Nevo, Emanuela Martelli
- 15 Comparison of the PHISICS/RELAP5-3D Ring and Block Model Results for Phase I of the OECD/NEA MHTGR-350 Benchmark
G. Strydom, A. S. Epiney, A. Alfonsi, C. Rabiti
- 36 Comparison of MYRRHA RELAP5 MOD 3.3 and RELAP5-3D Models on Steady State and PLOF Transient
D. Castelliti, T. Hamidouche
- 47 Thirty Years' Experience in RELAP5 Applications at GRNSPG & NINE
A. Petruzzi, M. Cherubini, F. D'Auria
- 88 Impact of Pressure Relief Holes on Core Coolability for a PWR During a Large-Break Loss-of-Coolant Accident with Core Blockage Using RELAP5-3D
Rodolfo Vaghetto, Timothy Crook, Alessandro Vanni, Yassin A. Hassan
- 96 Content, Completeness, and Consistency of Analytical Models for Regulatory Consideration
Robert P. Martin
- 113 The BEPU Evaluation Model with RELAP5-3D for the Licensing of the Atucha-II NPP
A. Petruzzi, M. Cherubini, M. Lanfredini, F. D'Auria, O. Mazzantini
- 161 BWR Station Blackout: A RISMIC Analysis Using RAVEN and RELAP5-3D
D. Mandelli, C. Smith, T. Riley, J. Nielsen, A. Alfonsi, J. Cogliati, C. Rabiti, J. Schroeder

—continued—

Contents continued

VOLUME 193 · NUMBER 1 · JANUARY 2016

- 175** Simulation of AER-DYN-002 and AER-DYN-003 Control Rod Ejection Benchmarks by
RELAP5-3D/PHISICS Coupled Codes
P. Balestra, C. Parisi, A. Alfonsi, C. Rabiti

- 183** Development of an Integrated Code System Using R5EXEC and RELAP5-3D
David Aumiller, Francis Buschman, Edward Tomlinson, Daniel Gill

- 200** RelapManager: A Safety Analysis Automation Framework and Software for RELAP5-3D
Robert P. Martin, Simone H. Morgan, Christopher Cragg

TECHNICAL NOTE

- 213** RELAP5-3D User Tools
J. Hope Forsmann