

Contents

Foreword

- Special Issue on the 13th International Conference on Probabilistic Safety Assessment and Management
Moosung Jae and Kwang-il Ahn 285

Special Issue

Original Articles

- Holistic Approach to Multi-Unit Site Risk Assessment: Status and Issues
Inn Seock Kim, Misuk Jang, and Seoung Rae Kim 286
- Current Status and Applications of Integrated Safety Assessment and Simulation Code System for ISA
J.M. Izquierdo, J. Hortal, M. Sanchez Perea, E. Meléndez, C. Queral, and J. Rivas-Lewicky 295
- Application of Dynamic Probabilistic Safety Assessment Approach for Accident Sequence Precursor Analysis: Case Study for Steam Generator Tube Rupture
Hansul Lee, Taewan Kim, and Gyunyoung Heo 306
- Development of an Accident Sequence Precursor Methodology and its Application to Significant Accident Precursors
Seunghyun Jang, Sunghyun Park, and Moosung Jae 313
- Recent Insights from the International Common-Cause Failure Data Exchange Project
Albert Kreuser and Gunnar Johanson 327
- Human Reliability Analysis for Digitized Nuclear Power Plants: Case Study on the LingAo II Nuclear Power Plant
Yanhua Zou, Li Zhang, Licao Dai, Pengcheng Li, and Tao Qing 335
- Identification of Fire Modeling Issues Based on an Analysis of Real Events from the OECD FIRE Database
Dominik Hermann 342
- A Review of the Progress with Statistical Models of Passive Component Reliability
Bengt O.Y. Lydell 349
- Advanced Reactor Passive System Reliability Demonstration Analysis for an External Event
Matthew Bucknor, David Grabaskas, Acacia J. Brunett, and Austin Grelle 360
- Use of the t-Distribution to Construct Seismic Hazard Curves for Seismic Probabilistic Safety Assessments
Eric Yee 373
- Identification and Analysis of External Event Combinations for Hanhikivi 1 PRA
Juho Helander 380
- Seismic Assessment and Performance of Nonstructural Components Affected by Structural Modeling
Jieun Hur, Eric Althoff, Halil Sezen, Richard Denning, and Tunc Aldemir 387
- An Evaluation Method for Tornado Missile Strike Probability with Stochastic Correlation
Yuzuru Eguchi, Takahiro Murakami, Hiromaru Hirakuchi, Soichiro Sugimoto, and Yasuo Hattori 395
- How to Use an Optimization-Based Method Capable of Balancing Safety, Reliability, and Weight in an Aircraft Design Process
Cristina Johansson, Micael Derelöv, and Johan Öllander 404
- Development of a Probabilistic Safety Assessment Framework for an Interim Dry Storage Facility Subjected to an Aircraft Crash Using Best-Estimate Structural Analysis
Belal Almomani, Dongchan Jang, Sanghoon Lee, and Hyun Gook Kang 411



An International Journal of the Korean Nuclear Society
NUCLEAR ENGINEERING AND TECHNOLOGY

Volume 49, Number 2, March 2017

Contents

Development of a Fully-Coupled, All States, All Hazards Level 2 PSA at Leibstadt Nuclear Power Plant Pavol Zvoncek, Olivier Nusbaumer, and Alfred Torri.....	426
Bayesian Optimization Analysis of Containment-Venting Operation in a Boiling Water Reactor Severe Accident Xiaoyu Zheng, Jun Ishikawa, Tomoyuki Sugiyama, and Yu Maruyama	434
Risk Assessment Strategy for Decommissioning of Fukushima Daiichi Nuclear Power Station Akira Yamaguchi, Sunghyon Jang, Kazuki Hida, Yasunori Yamanaka, and Yoshiyuki Narumiya	442
Waste Isolation Pilot Plant Performance Assessment: Radionuclide Release Sensitivity to Diminished Brine and Gas Flows to/from Transuranic Waste Disposal Areas Brad A. Day, R.C. Camphouse, and Todd R. Zeitler	450

This journal was supported by the Korean Federation of Science and Technology Societies Grant funded by the Korean Government (Ministry of Education).