Refereed publications

2023

Kee, Ernie, and Martin Wortman. "Unanticipated protection failure scenarios optimistically bias reactor safety metrics." Nuclear Engineering and Design 403 (2023): 112151.

Bui, Ha, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Probabilistic Validation: Computational Platform and Application to Fire Pra of Nuclear Power Plants." ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering (2023): 1-42.

Bui, Ha, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Probabilistic Validation: Theoretical Foundation and Methodological Platform." ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering 9, no. 2 (2023): 021204.

2022

Heckmann, Klaus, Dong-Hyun Ahn, John Beal, Wen-Chi Cheng, Xinjian Duan, Tatjana Jevremovic, Ernie Kee et al. "Estimation of pipe failure frequencies in the absence of operational experience data: A pilot study." Nuclear Engineering and Design 398 (2022): 111990.

Cheng, Wen-Chi, John Beal, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Modeling interconnections of safety and financial performance of nuclear power plants, part 3: Spatiotemporal probabilistic physics-of-failure analysis and its connection to safety and financial performance." Progress in Nuclear Energy 153 (2022): 104382.

2020

Sakurahara, Tatsuya, Zahra Mohaghegh, and Ernie Kee. "Human Reliability Analysis-Based Method for Manual Fire Suppression Analysis in an Integrated Probabilistic Risk Assessment." ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering 6, no. 1 (2020): 011010.

Sakurahara, Tatsuya, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Global importance measure methodology for integrated probabilistic risk assessment." Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability 234, no. 2 (2020): 377-396.

Cheng, Wen-Chi, Tatsuya Sakurahara, Sai Zhang, Pegah Farshadmanesh, Seyed Reihani, Ernie Kee, Zahra Mohaghegh et al. "Review and categorization of existing studies

on the estimation of probabilistic failure metrics for Reactor Coolant Pressure Boundary piping and steam generator tubes in Nuclear Power Plants." Progress in Nuclear Energy 118 (2020): 103105.

Bui, Ha, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. Spatiotemporal integration of an agent-based first responder performance model with a fire hazard propagation model for probabilistic risk assessment of nuclear power plants. ASCE-ASME J Risk and Uncert in Engrg Sys Part B Mech Engrg 6, no. 1 (2020).

Cheng, Wen-Chi, Tatsuya Sakurahara, Sai Zhang, Pegah Farshadmanesh, Seyed Reihani, Ernie Kee, Zahra Mohaghegh et al. "Review and categorization of existing studies on the estimation of probabilistic failure metrics for Reactor Coolant Pressure Boundary piping and steam generator tubes in Nuclear Power Plants." Progress in Nuclear Energy 118 (2020): 103105.

2019

Sakurahara, Tatsuya, Nicholas O'Shea, Wen-Chi Cheng, Sai Zhang, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Integrating renewal process modeling with Probabilistic Physics-of-Failure: Application to Loss of Coolant Accident (LOCA) frequency estimations in nuclear power plants." Reliability Engineering & System Safety 190 (2019): 106479.

Sakurahara, Tatsuya, Grant Schumock, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. Simulation-informed probabilistic methodology for common cause failure analysis. Reliability Engineering & System Safety 185 (2019): 84-99.

Bui, Ha, Tatsuya Sakurahara, Justin Pence, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. An algorithm for enhancing spatiotemporal resolution of probabilistic risk assessment to address emergent safety concerns in nuclear power plants. Reliability Engineering & System Safety 185 (2019): 405-428.

Pence, Justin, Tatsuya Sakurahara, Xuefeng Zhu, Zahra Mohaghegh, Mehmet Ertem, Cheri Ostroff, and Ernie Kee. Data-theoretic methodology and computational platform to quantify organizational factors in socio-technical risk analysis. Reliability Engineering & System Safety 185 (2019): 240-260.

Sakurahara, Tatsuya, Zahra Mohaghegh, and Ernie Kee. Human Reliability Analysis (HRA)-Based Method for Manual Fire Suppression Analysis in an Integrated Probabilistic Risk Assessment RISK 18 (2019): 1117.

Pence, Justin, Ian Miller, Tatsuya Sakurahara, James Whitacre, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. GIS–Based Integration of Social Vulnerability and Level 3 Probabilistic Risk Assessment to Advance Emergency Preparedness, Planning, and Response for Severe Nuclear Power Plant Accidents. Risk analysis 39, no. 6 (2019):

1262-1280.

Bui H, Sakurahara T, Pence J, Reihani S, Kee E, Mohaghegh Z. An algorithm for enhancing spatiotemporal resolution of probabilistic risk assessment to address emergent safety concerns in nuclear power plants. Reliability Engineering & System Safety. 2019;185:405–428.

Farshadmanesh P, Sakurahara T, Reihani S, Kee E, Mohaghegh Z. "SHAKE-RoverD Framework for Nuclear Power Plants: A Streamlined Approach for Seismic Risk Assessment. Nuclear Technology. 2019;205(3):442–463.

Sakurahara T, Schumock G, Reihani S, Kee E, Mohaghegh Z. Simulation-Informed Probabilistic Methodology for Common Cause Failure Analysis. Reliability Engineering & System Safety. 2019;185:84–99.

2018

Sakurahara T, Mohaghegh Z, Reihani S, Kee E, Brandyberry M, Rodgers S. An integrated methodology for spatio-temporal incorporation of underlying failure mechanisms into fire probabilistic risk assessment of nuclear power plants. Reliability Engineering & System Safety. 2018;169:242–257.

Sakurahara T, Mohaghegh Z, Reihani S, Kee E. Methodological and Practical Comparison of Integrated Probabilistic Risk Assessment (I-PRA) with the Existing Fire PRA of Nuclear Power Plants. Nuclear Technology. 2018;204(3):354–377.

Pence J, Abolhelm M, Mohaghegh Z, Reihani S, Ertem M, Kee E. Methodology to evaluate the monetary benefit of Probabilistic Risk Assessment by modeling the net value of Risk-Informed Applications at nuclear power plants. Reliability Engineering & System Safety. 2018;175:171–182.

2017

Zheng G, Nelson P, Kee E, Yilmaz F, Zhang Z, Wortman M. Whether a Theory of Nuclear Safety is deterministic or probabilistic? A metatheory. Annals of Nuclear Energy. 2017;110:979–988.

2016

Vaghetto R, Childs M, Kee E, Hassan YA. Observations and measurements of boric acid precipitation scenarios. Progress in Nuclear Energy. 2016;91:302–309.

Kee E, Hasenbein J, Zolan A, et al. RoverD: Use of Test Data in GSI-191 Risk Assessment. Nuclear Technology. 2016;196(2):270–291.

2015

Seung Jun Kim, Kerry J. Howe, Janet J. Leavitt, Kyle Hammond, Lana Mitchell, Ernie Kee, Edward D. Blandford, An experimental study of the corrosion and precipitation of aluminum in the presence of trisodium phosphate buffer following a loss of coolant accident (LOCA) scenario, Nuclear Engineering and Design, Volume 282, February 2015, Pages 71–82

Kerry J. Howe, Lana Mitchell, Seung-Jun Kim, Edward D. Blandford, Ernest J. Kee, Corrosion and solubility in a TSP-buffered chemical environment following a loss of coolant accident: Part 1 – Aluminum, Nuclear Engineering and Design, Volume 292, October 2015, Pages 296–305.

2011

Rodgers S, Betancourt C, Kee E, Yilmaz F, Nelson P. Integrated Power Recovery Using Markov Modeling. Journal of Engineering for Gas Turbines & Power. 2011;133(11):45061– 45064.

2010

Ernie Kee and Elmira Popova. 2010. Risk applications in commercial nuclear power. J. J. Hasenbein, ed. INFORMS TutORials in Operations Research, Vol. 7. INFORMS, Hanover, MD, pp. 2661.

2009

Koç A, Morton D, Popova E, Hess S, Kee E, Richards D. Prioritizing Project Selection. Engineering Economist. 2009;54(4):267–297.

2006

Popova E, Yu W, Kee E, Sun A, Richards D, Grantom R. Basic factors to forecast maintenance cost and failure processes for nuclear power plants. Nuclear Engineering & Design. 2006;236(14-16):1641–1647.

1996

Ernie Kee, Experience with Incomplete Rod Insertion in Fuel with Burnup Exceeding Approximately 40 GWD/MTU, NUREG/CP-0157, Vol. 1, Twenty-Fourth Reactor Safety Information Meeting, October 1996, pp. 185.

Symposia

2023

Kee, Ernie, and Martin Wortman. "PRA and Protective System Maintenance." (2023). https://www.intechopen.com/online-first/86150

2022

Wortman, Martin, Ernest Kee, and Pranav Kannan. "A Note on Probability Quantification for Protective System Efficacy Analysis: Stochastic Dynamics, Information Flow, and Initiating Event Arrival Times." In ASME International Mechanical Engineering Congress and Exposition, vol. 86717, p. V009T14A025. American Society of Mechanical Engineers, 2022.

Beal, John, Pegah Farshadmanesh, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "A Systematic Enterprise Risk Management Framework for Modeling the Interactions of Safety and Financial Performance in Nuclear Power Plants." In 16th International Conference on Probabilistic Safety Assessment and Management, PSAM 2022. 2022.

2021

Wortman, Martin A., Ernest JL Kee, and Pranav Kannan. "Is Core Damage Frequency an Informative Risk Metric?." arXiv preprint arXiv:2105.09798 (2021).

Wortman, Martin, Ernie Kee, and Pranav Kannan. "The Role of Protective System Reliability Analysis in the Study of System Safety." In ASME International Mechanical Engineering Congress and Exposition, vol. 85697, p. V013T14A032. American Society of Mechanical Engineers, 2021.

Kee, Ernie, and Martin Wortman. "Nuclear Power: On PRA and Protective System Maintenance." In ASME International Mechanical Engineering Congress and Exposition, vol. 85697, p. V013T14A034. American Society of Mechanical Engineers, 2021.

$\boldsymbol{2020}$

Wortman, Martin, Ernest Kee, and Pranav Kannan. "Safety-Critical Protective Systems and Margins of Safety." arXiv preprint arXiv:2010.09674 (2020).

Farshadmanesh, Pegah, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Risk-Informed Analysis of Nuclear Power Plant FLEX Storage Building." In 30th European Safety and Reliability Conference, ESREL 2020 and 15th Probabilistic Safety Assessment and Management Conference, PSAM 2020, pp. 2437-2443. Research Publishing Services, 2020.

Sakurahara, Tatsuya, Ha Bui, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Enhancing realism in fire probabilistic risk assessment of nuclear power plants." In 30th European Safety and Reliability Conference, ESREL 2020 and 15th Probabilistic Safety Assessment and Management Conference, PSAM 2020, pp. 1836-1843. Research Publishing Services, 2020.

Beal, John, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "An algorithm for risk-informed analysis of advanced nuclear reactors with a case study of pipe failure rate estimation." In 30th European Safety and Reliability Conference, ESREL 2020 and 15th Probabilistic Safety Assessment and Management Conference, PSAM 2020, pp. 4170-4177. Research Publishing Services, 2020.

Alkhatib, Sari, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, Brian Ratte, and Zahra Mohaghegh. "Academia-Industry Collaboration to Advance Screening Processes in Fire PRA of Nuclear Power Plants." In 30th European Safety and Reliability Conference, ESREL 2020 and 15th Probabilistic Safety Assessment and Management Conference, PSAM 2020, pp. 4270-4277. Research Publishing Services, 2020.

Sakurahara, Tatsuya, Seyed Reihani, Ernie Kee, and Zahra Mohaghegh. "Global importance measure methodology for integrated probabilistic risk assessment." Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability 234, no. 2 (2020): 377-396.

2019

Beal, John, Tatsuya Sakurahara, Justin Pence, Pegah Farshadmanesh, Ernie Kee, and Zahra Mohaghegh. "Coupling Degradation and Maintenance To Model Safety Risk and Financial Risk Under an Integrated Enterprise Risk Management for Nuclear Power Plants." SMiRT-25 Charlotte, NC, USA, August 4-9, 2019

2015

Ernie Kee and David Johnson, Review of PRA in Regulated Power Reactor Applications, Probabilistic Safety Assessment and Management PSAM13, October 2D7, 2015,

Seoul, Korea

Ha Bui Justin Pence, Zahra Mohaghegh, Ernie Kee, Spatio-Temporal Socio-Technical Risk Analysis Methodology for Emergency Response, Probabilistic Safety Assessment and Management PSAM13, October 2D7, 2015, Seoul, Korea

Zahra Mohagegh, Seyed A. Reihani, Ernie Kee, Estimating Loss-of-coolant Accident (LOCA) Frequencies via Spatio-temporal Methodology, Probabilistic Safety Assessment and Management PSAM13, October 27, 2015, Seoul, Korea.

Ernie Kee, John Hasenbein, Alex Zolan, Phil Grissom, Seyed Reihani, Fatma Yilmaz, Bruce Letellier, Vera Moiseytseva, David Imbaratto, RoverD: Use of Test Data in GSI-191 Risk Assessment, The 16th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-16), Chicago, IL, USA, August 30-September 4, 2015.

$\mathbf{2014}$

Tatsuya Sakurahara, Seyed Reihani, Mehmet Ertem, Zahra Mohaghegh, and Ernie Kee, Analyzing Importance Measure Methodologies for Integrated Probabilistic Risk Assessment in Nuclear Power Plants, Probabilistic Safety Assessment and Management PSAM 12, June 2014, Honolulu, Hawaii.

Tatsuya Sakurahara, Seyed A. Reihani, Zahra Mohaghegh, Mark Brandyberry, Ernie Kee, David Johnson, Shawn Rodgers, and Mary Anne Billings, Developing a New Fire PRA Framework by Integrating Probabilistic Risk Assessment with a Fire Simulation Module, Probabilistic Safety Assessment and Management PSAM 12, June 2014, Honolulu, Hawaii

Marzieh Abolhelma, Justin Pence, Zahra Mohaghegh, and Ernie Kee, Toward Demonstrating the Monetary Value of Probabilistic Risk Assessment for Nuclear Power Plants, Probabilistic Safety Assessment and Management PSAM 12, June 2014, Honolulu, Hawaii.

David Morton, Bruce Letellier, Jeremy Tejada, David Johnson, Zahra Mohaghegh, Ernie Kee, Vera Moiseytseva, Seyed Reihani, and Alexander Zolan, SENSITIVITY ANALYSES OF A SIMULATION MODEL FOR ESTIMATING FIBER-INDUCED SUMP SCREEN AND CORE FAILURE RATES, ICONE22-30917, Proceedings of the 22nd International Conference on Nuclear Engineering, July 7–11, 2014, Prague, Czech Republic

Gangyang Zheng, Paul Nelson, Ernest Kee, Fatma Yilmaz, Vera Moiseytseva, A RISMC Perspective of the Reasonable Risk-Protection Measures, ICONE22-31174, Proceedings of the 22nd International Conference on Nuclear Engineering, July 7–11, 2014, Prague, Czech Republic.

2013

Gangyang Zheng, Paul Nelson, Ernest Kee, Fatma Yilmaz, and Zhijian Zhang, A RISMC-Informed Metatheory of Theories of Nuclear Safety, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Janet J. Leavitt, Bruce Letellier, Kerry J. Howe, Seung-Jun Kim, Seyed A. Reihani, and Ernie Kee, Quantifying Chemical Effects Using the Risk Informed Method, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Ahmed Elbanna, Zahra Mohaghegh, Ernie Kee, Seyed A. Reihani (Univ of Illinois), Reza Kazemi, and Shawn Rodgers, Towards Physics-Based Seismic PRA, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Tatsuya Sakurahara, Zahra Mohaghegh, Ernie Kee, Shawn Rodgers, Mark Brandyberry, Reza Kazemi, and Seyed A. Reihani, A New Integrated Framework to Advance Fire PRA for Nuclear Power Plants, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Rodolfo Vaghetto, Ernie Kee, and Yassin A. Hassan, RELAP5-3D Simulation of Core Flow Paths During a Hypothetical Debris-Generated Core Blockage Scenario, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Bruce Letellier, Ernie Kee, and David Morton, CASA Grande Uncertainty Propagation Framework for Risk-Informed Closure of GSI-191, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Ernie Kee, Zahra Mohaghegh, Reza Kazemi, Seyed A. Reihani, Bruce Letellier, Rick Grantom, Risk-Informed Decision Making: Application in Nuclear Power Plant Design & Operation, 2013 ANS Winter Meeting and Nuclear Technology Expo, Embedded Topical: Risk Management for Complex Socio-Technical Systems [RM4CSS], November 10–14, 2013, Washington, DC.

Fatma Yilmaz and Ernie Kee, Tier 1 Nuclear Safety Performance Indicator at STP: Risk Index, PSA 2013, the International Topical Meeting on Probabilistic Safety Assessment and Analysis, September, 22–27, 2013, Columbia, South Carolina. Zahra Mohaghegh, Ernie Kee, Seyed A. Reihani, Reza Kazemi, David Johnson, Rick Grantom, Karl Fleming, Tim Sande, Bruce Letellier, Gilbert Zigler, David Morton, Kerry Howe, Janet Leavitt, Yassin A. Hassan, Rodolfo Vaghetto, Saya Lee, Risk-Informed Resolution of Generic Safety Issue 191, PSA 2013, the International Topical Meeting on Probabilistic Safety Assessment and Analysis, September, 22–27, 2013, Columbia, South Carolina.

2012

Timothy D. Sande, Gilbert L. Zigler, Ernie J. Kee, Bruce C. Letellier, C. Rick Grantom, and Zahra Mohaghegh, The Benefits of Using a Risk-Informed Approach to Resolve GSI-191, Proceedings of the 2012 20th International Conference on Nuclear Engineering, ICONE20POWER2012-54604, Anaheim, California, USA, July 30 – August 3, 2012

Ernie J. Kee, Shawn S. Rodgers, Fatma Yilmaz, Paul Nelson, Paul J. Rodi, Vera Moiseytseva, and Chase Gilmore, Probability of Critical Station Blackout via Computational Evaluation of Non-recovery Integrals, Proceedings of the 2012 20th International Conference on Nuclear Engineering, ICONE20POWER2012-54569, Anaheim, California, USA, July 30 – August 3, 2012

2011

Shawn Rodgers, Coral Betancourt, Ernie Kee, Paul Nelson, and Paul Rodi, Toward Quantification of the Uncertainty in Estimating Frequency of Critical Station Blackout, Proceedings of the International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2011), ISBN 978-85-63688-00-2, Rio de Janeiro, RJ, Brazil, May 8–12, 2011.

2010

Shawn Rodgers, Coral Betancourt, Ernie Kee, Fatma Yilmaz, and Paul Nelson, Integrated Power Recovery using Markov Modeling, Proceedings of the 18th International Conference on Nuclear Engineering 2010, ICONE 18-29021, Xian China, May 17–21, 2010.

Ernie Kee and Fatma Yilmaz, Estimating and Presenting Transient Risk for On-Line Maintenance Using the STP Balance of Plant Model, PSAM10, Probabilistic Safety Assessment Meeting 2010, Seattle, WA, June 7–11, 2010.

Shuwen (Eric) Wang, Ernie Kee, and Fatma Yilmaz, Quantification of Conditional Probability for Triggering Events using fault Tree Approach, PSAM10, Probabilistic Safety Assessment Meeting 2010, Seattle, WA, June 7–11, 2010.

2009

Ernie Kee, Fatma Yilmaz, Don Wakefield and Steve Epstein, STP Balance of Plant Update Experience and Results, ICONE 17-75006, Proceedings of the 17th International Conference on Nuclear Engineering, Brussels, Belgium, July 12–16, 2009.

Fatma Yilmaz, Ernie Kee, and Drew Richards, STP Risk Managed Technical Specification Software Design and Implementation, ICONE 17-75043, Proceedings of the 17th International Conference on Nuclear Engineering, Brussels, Belgium, July 12–16, 2009.

2008

Ernie Kee, Drew Richards, C. Rick Grantom, James K. Liming, Risk Managed Technical Specification Implementation at South Texas Project UNITS 1 and 2, ICONE16-48150, Proceedings of the 16th International Conference on Nuclear Engineering, Orlando, Florida, USA, May 11–15, 2008.

Ali Koç David Morton, Elmira Popova, Stephen Hess, Ernie Kee Drew Richards, Optimizing Project Prioritization Under Budget Uncertainty, ICONE16-48108, Proceedings of the 16th International Conference on Nuclear Engineering, Orlando, Florida, USA, May 11–15, 2008.

Inderjeet Singh, Elmira Popova, Ernie Kee, Optimal Preventive Maintenance Policy Under A Budget Constraint, ICONE16-48107, Proceedings of the 16th International Conference on Nuclear Engineering, Orlando, Florida, USA, May 11–15, 2008.

2007

Ernie Kee, Vera Moiseytseva, Alexander Galenko, David Morton, Elmira Popova, Incorporation of Unit 1 Inspection Results on the STP Reactor Vessel Head Nuclear Asset Management Analysis, PVP2007-26229, Proceedings of PVP 2007/CREEP 8, July 22–26, 2007, San Antonio, TX, USA.

Ali Koç, David Morton, Elmira Popova, Ernie Kee, Drew Richards, Alice Sun, Stephen Hess, Project Prioritization via Optimization, PVP2007-26578, Proceedings of PVP 2007/CREEP 8, July 22–26, 2007, San Antonio, TX, USA.

Shuwen Wang, Paul Nelson, Ernie Kee, Application of Entry-time Processes within Probabilistic Risk Assessment (PRA) and Generation Risk Assessment (GRA), PVP200726625, Proceedings of PVP 2007/CREEP 8, July 22–26, 2007, San Antonio, TX, USA.

2006

Alexander Galenko, Elmira Popova, Ernie Kee, and Rick Grantom, Optimal Preventive Maintenance under Decision-Dependent Uncertainty, ICONE14-89093, Proceedings of the 14th International Conference on Nuclear Engineering, Miami, FL, USA, July 17–20, 2006.

Ernest J. Kee, Alice Sun, Shawn Rodgers, Elmira Popova, Paul Nelson, Vera Moiseytseva (Erguina), and Eric Wang, A Method to Quantify Plant Availability and Initiating Event Frequency Using a Large Event Tree, Small Fault Tree Model, ICONE14-89321, Proceedings of the 14th International Conference on Nuclear Engineering, Miami, FL, USA, July 17–20, 2006.

Alex Galenko, Elmira Popova, Ernie Kee, and Rick Grantom, Optimal Preventive Maintenance Under Decision Dependent Uncertainty, ICONE14-89093, Proceedings of the 14th International Conference on Nuclear Engineering Miami, FL, July 17–20, 2006.

Paul Nelson, Shuwen Wang, and Ernie Kee, Application Of Entry-Time Processes To Asset Management In Nuclear Power Plants, ICONE14-89197, Proceedings of the 14th International Conference on Nuclear Engineering Miami, FL, July 17–20, 2006.

2005

Alex Galenko, David Morton, Elmira Popova, Rick Grantom, Ernie Kee, Drew Richards, and Alice Sun, Operational Models and Methods for Risk Informed Nuclear Asset Management, Proceedings of the 2005 ANS International Topical Meeting on Probabilistic Safety Analysis, San Francisco, CA, September 11–15, 2005.

Wei Yu, Elmira Popova, Ernie Kee, Alice Sun, and Rick Grantom, BASIC FACTORS TO FORECAST MAINTENANCE COST FOR NUCLEAR POWER PLANTS, Proceedings of the 13th International Conference on Nuclear Engineering Beijing, China, May 16–20, 2005.

Alice Sun, Ernie Kee, Wei Yu, Elmira Popova, Rick Grantom, and Drew Richards, APPLICATION OF CROW-AMSAA ANALYSIS TO NUCLEAR POWER PLANT EQUIPMENT PERFORMANCE, Proceedings of the 13th International Conference on Nuclear Engineering Beijing, China, May 16–20, 2005.

Jim Liming, Ernie Kee, and Richard Montgomery, Risk-Informed Decision-Making for Prudent Asset Management, Proceedings of the 2005 ANS International Topical Meeting on Probabilistic Safety Analysis, San Francisco, CA, September 11–15, 2005.

2004

Ernie Kee and others. Using Risk-Informed Asset Management for Feedwater System Preventative Maintenance Optimization. Journal of Nuclear Science and Technology, Vol 41, No. 3, 2004.

Vera Erguina and Ernie Kee, Using RIAM for Optimizing Reactor Vessel Head Leak Failure Mode Maintenance Strategies, ICONE12-49376, Proceedings of the International Conference on Nuclear Engineering, Washington, DC, April 25–29, 2004.

2003

Jim Liming, Ernie Kee, and others, Practical Application of Decision Support Metrics for Power Plant Risk-Informed Asset Management, ICONE11-36121, Proceedings of the 11th International Conference on Nuclear Engineering, Tokyo, Japan, April 20–23, 2003

Ernie Kee, Alice Sun, and others, Using Risk-Informed Asset Management for FW system Preventative Maintenance Optimization, ICONE11-36067, Proceedings of the 11th International Conference on Nuclear Engineering, Tokyo, Japan, April 20–23, 2003

2002

Ernie Kee, Drew Richards, Ray Disnard, Rick Grantom and Tom Mikschl, Extensions to On-Line Maintenance Using BOP PRA Results: Initial Deployment in STP Units 1 and 2, Proceedings of the 6th International Conference on Probabilistic Safety Assessment and Management, San Juan, Puerto Rico, June 27, 2002.

Jim Liming and Ernie Kee, Integrated Risk-Informed Asset Management for Commercial Nuclear Power Stations, ICONE10-22033, Proceedings of the 10th International Conference on Nuclear Engineering, Washington, DC, April 14–18, 2002.

E. Kee and Jim Liming, Drew Richards, Risk-Informed Profitability-Based Analysis Support of Nuclear Power Station Balance-Of-Plant Change Management, Proceedings of the 9th International Conference on Nuclear Engineering, Washington, DC, April 14–18, 2002.

2000

Ernie Kee and Drew Richards, Using Electronic Methods to Improve Audit and Storage Performance Related to PRA Model Documentation at STP, ICONE-8275, Proceedings of the 8th International Conference on Nuclear Engineering, Baltimore, MA, April 2–6, 2000.

$\boldsymbol{1997}$

Ernie Kee and Lars Bjornkvist, Application of a Semi-Empirical Rod Drop Model for Studying Rod Insertion Anomalies at South Texas Project and Ringhals Unit 4, Proceedings of the 1997 ANS International High Burnup Fuel Performance Meeting, March, 1997.

1996

Ernie Kee and Hueming Chow, A Simplified Overall Heat Transfer Coefficient Method for Verifying Reactor Power Estimates in a Pressurized Water Reactor, Presented at the 1996 RELAP5 International Users Seminar, March 18-21, 1996.

1983

Ernie Kee and Jay W. Spore, A Counter-Current Flow Model for RELAP5, Proceedings of the 3rd Multi-Phase Flow and Heat Transfer Symposium-Workshop, April 18-20, 1983.

1981

Keith G. Condie, Ernie Kee and Glenn A. Taylor, RELAP5 Calculation of LOFT Small Break Experiments L3-1 and L3-7, Proceedings of ANS Specialists Meeting on Small Break Loss-of-Coolant Accident Analysis of LWRs, August 25-27, 1981.

Reports

Kaspar, Kristin, Brian Ratte, Mary Anne Billings, Zahra Mohaghegh, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee et al. *Integrated Fire Probabilistic Risk Assessment* (*PRA*) Modeling in Support of Operational Efficiency. No. DOE-UIUC-0008856. STP Nuclear Operating Company, 2022. Mohaghegh, Zahra, Tatsuya Sakurahara, John Beal, Wen-Chi Cheng, Pegah Farshadmanesh, Seyed Reihani, Ernie Kee, Arden Rowell, and Fatma Yilmaz. Systematic Enterprise Risk Management by Integrating the RISMC Toolkit and Cost-Benefit Analysis. No. DOE-UIUC-0008700. Univ. of Illinois at Urbana-Champaign, IL (United States); South Texas Project Nuclear Operating Company, Bay City, TX (United States), 2021.

Ernie Kee and others, Base Input for LOFT RELAP5 Calculations, EGG-LOFT-5199, EG&G Idaho, Inc., Idaho Falls, ID, July 1980.

Ernie Kee and others, Best Estimate Prediction for LOFT Nuclear Experiment L3-7, EGG-LOFT- 5172, EG&G Idaho, Inc., Idaho Falls, ID, June 1980.

Ernie Kee and William H. Grush, Best Estimate Prediction for LOFT Nuclear Experiment L2-3, EP-L2-3, EG&G Idaho, Inc., Idaho Falls, ID, April 1979.