

REFERENCES

1. INSAG-12, Basic safety principles for nuclear power plants, International Atomic Energy Agency, Vienna, 1999.
2. Safety Standards Series No. NS-R-1, Safety of nuclear power plants: Design: Safety requirements, International Atomic Energy Agency, Vienna, 2000.
3. Safety Reports Series No. 32, Implementation of accident management programmes in nuclear power plants. International Atomic Energy Agency, Vienna, 2004.
4. Nuclear Safety Regulations for Reactors of Nuclear Power Plants, Management Documents, VD-T-001-0-97, VATESI, Vilnius, Lithuania, 1997.
5. Safety Reports Series No. 23, Accident analysis for nuclear power plants. International Atomic Energy Agency, Vienna, 2002.
6. **Kaliatka A., Uspuras E.**, Accident and transient processes at NPPs with channel-type reactors: monography, Kaunas: Lithuanian Energy Institute. Thermophysics: 28. ISBN 9986-492-87-4. 2006. p. 298.
7. **Almenas K., Kaliatka A., Uspuras E.** Ignalina RBMK-1500. A Source Book. Extended and Updated Version. Lithuanian Energy Institute, Kaunas, Lithuania, 1998, 198 p.
8. **Afanasieva A., Burlakov E., Krayushkin A., Kubarev A.**, The characteristics of the RBMK core. Nuclear Technology. Vol. 103, Moscow, Russia, 1993, p. 1–9.
9. **Novoselsky O. Yu., Filinov V. N.**, Computational assessment of RBMK pressure tube rupture at accident heating. Proc. International Exchange Forum on Analytical Methods and Computational Tools for NPP Safety Assessment, Obninsk, Russia, 1996, pp. 1-10.
10. **Rimkevicius S., Urbonavicius E., Cesna B.**, Safety margins of RBMK-1500 Accident Localization System at Ignalina NPP. Safety margins of operating reactors. Analysis of uncertainties and

implications for decision making. International Atomic Energy Agency, TECDOC-1332, Vienna, 2003. pp. 95-106.

11. **Rimkevičius S., Uspuras E.**, Modelling of thermal hydraulic transient processes in nuclear power plants: Ignalina compartments, Kaunas: Lithuanian Energy Institute. 2007. ISBN 978-1-56700-247-8. p. 198.
12. **Povilaitis M., Urbonavičius E., Rimkevičius S.**, Confinements of nuclear power plants and processes in confinements // *Energetika*. ISSN 0235-7208 / 2005. No. 4, p. 18-27.
13. Pressure suppression system containments, A state-of-the-art report by a group of experts of the NEA/CSNI, CSNI report 126, 1986.
14. **In-depth safety assessment of Ignalina Nuclear Power Plant.** Ignalina NPP report, Visaginas, Lithuania, 1996.
15. **The analysis of steam-gas mixture release from the Reactor Cavity of RBMK-1500 reactor for determination of the boundaries.** Phase 3, methodology of the analysis. Report No. 74.063, NIKIET, Moscow, 1999 (in Russian).
16. **The analysis of steam-gas mixture release from the Reactor Cavity of RBMK-1500 reactor for determination of the boundaries.** Phase 4, results of the analysis. Report No. 74.069, NIKIET, Moscow, 2000 (in Russian).
17. **Level 2 PSA Methodology and Severe Accident Management,** Committee on the Safety of Nuclear Installations (CSNI) of the OECD Nuclear Energy Agency (NEA), OCDE/GD(97)198, 1997.
18. **Afremov D.A., Solovjev S.L.**, Development and application of design-theoretical methods of the analysis of certain severe accidents for RBMK reactor. Heat-and-power engineering. No. 4, Moscow, Russia. 2001. (In Russian).
19. **Safety Reports Series No. 43,** Accident analysis for nuclear power plants with graphite moderated boiling water RBMK reactors, International Atomic Energy Agency, Vienna, 2005.
20. **Cesna B., Rimkevicius S., Urbonavicius E., Babilas E.**, Reactor Cavity and ALS thermal-hydraulic evaluation in the case of Fuel Channels ruptures at Ignalina NPP // *Nuclear Engineering and Design* 232 (2004) 57–73.
21. **Vasilevskij V.P., Nikitin J.M., Petrov A.A., Potapov A.A., Tcherkashev J.M.** Features of RBMK severe accidents development and approaches to such accidents management//

References

- Atomic energy. Vol. 90, Issue 6. Moscow, Russia. 2001. (In Russian).
22. **Kramerov A.J., Michailov D.A.** About the approach to severe accident studying in channel boiling reactors (basically at overheating by decay heat) // Proc. of the 5th International Information Exchange Forum “Safety Analysis for NPPs of VVER and RBMK Types Reactors”. Obninsk, Russia .16-20 October 2000. 8 p. (In Russian).
 23. **Final Safety Justification for Ignalina Nuclear Power Plant Diverse Shutdown System.** Safety justification for Additional Hold-down System, DS&S Report XE405-TEC188_Appendix-E, Ignalina NPP, 2004.
 24. **Ignalina NPP Safety Analysis Report.** Volume 3 Task Group 5 “Assessment of Reactor Cavity Integrity”, VATTENFALL, Ignalina NPP report, Visaginas, Lithuania, 1996.
 25. **Fedorov V., Lipov M., Wang Z. et al.**, RELAP5/MOD3 Analysis of RBMK-1000 Reactor Fuel Channel Coolant Flow Decrease due to Stop Control Valve Destruction, RELAP5 International Users Seminar, Baltimore, Maryland, USA. 1994, p.16.
 26. **Medvedeva N., Timkin S., Andrejev A., Zhilko V., Peshkov I., Marciniuk D., Poshtovaja O.**, “Analysis of piping behavior in the graphite stack of RBMK-1000 in case of single technological channel rupture”, Annual report, Elektrogorsk research centre on safety of nuclear power plants, Elektrogorsk, pp. 11–21, 2004 (in Russian).
 27. **Barselina Report**, Phase 5, final version. Visaginas, Ignalina NPP, Lithuania. 2001.
 28. **Ušpuras E., Kaliatka A., Augutis J., Rimkevičius S., Urbonavičius E., Kopustinskas V.**, Probabilistic and deterministic analysis of BBDA in RBMK-1500 // Energetika. ISSN 0235-7208. 2006. No. 3, p. 8-23
 29. **C. D. Fletcher et. al.**, RELAP5/MOD3 code manual user’s guidelines, Idaho National Engineering Lab., NUREG/CR-5535, 1992.
 30. **Urbonas R., Uspuras E., Kaliatka A.** State-of-the-art computer code RELAP5 validation with RBMK-related separate phenomena data, Nuclear Engineering and Design. ISSN 0029-5493. Vol. 225, 2003, p. 65-81.

31. **Allison C. M., Wagner R. J.**, RELAP5/SCDAPSIM/MOD3.2 Input Manual Supplemental. Innovative Systems Software. LLC, USA. 2001.
32. **Kaliatka A., Uspuras E.**, Benchmark analysis of Main Circulation Pump trip events at the Ignalina NPP using RELAP5 code, Nuclear Engineering and Design. ISSN 0029-5493. Vol. 202, 2000. p. 109-118.
33. **RELAP5-3D Code Manual**, Appendix A, RELAP5-3D Input Data Requirements, INEEL-EXT-98-00834-V2, 1998.
34. **Paik S.** RELAP5-3D multidimensional heat conduction enclosure model for RBMK reactor application. Nuclear Technology. 1999. Vol. 128, pp. 87-102.
35. **Ušpuras E., Kaliatka A.** Evaluation of Weak Heat Conduction Mechanism for Long-term LOCAs in RBMK-1500 // Nuclear Technology. 2007, Vol. 158, p. 18-25.
36. **Ušpuras E., Urbonavičius E., Kaliatka A.** Specific features of the RBMK-1500 reactor and BDBA management // Energetika. ISSN 0235-7208. 2005, Nr. 3, P. 1–9.
37. **Ušpuras E., Kaliatka A., Augutis J., Rimkevičius S., Urbonavičius E., Kopustinskas V.** Safety analysis of beyond design basis accidents in RBMK-1500 reactors // Annals of Nuclear Energy. ISSN 0306-4549. 2007, Vol. 34, p. 356-373.
38. **Kaliatka A., Uspuras E.**, Thermal-hydraulic analysis of accidents leading to local coolant flow decrease in the Reactor Cooling System of RBMK-1500. Nuclear Engineering and Design, 2002. Vol. 217, N 1–2, 91–101.
39. **Allelein H.J., Arndt S., Klein-Hessling W., Schwarz S., Spengler C., Weber G.**, COCOSYS: Status of development and validation of the German containment code system, Nuclear Engineering and Design, 238 (4), p.872-889, 2008
40. **Urbonavicius E., Rimkevičius S.**, RALOC4 Code Validation Against Measured Data at Ignalina NPP During Single Main Safety Valve Opening, Nuclear Engineering and Design. 2002, 216, p. 89-97.
41. **Fedorov V., Lipov M., Wang Z. et al.**, RELAP5/MOD3 Analysis of RBMK-1000 reactor Fuel Channel coolant flow decrease due to stop control valve destruction. Proc. of RELAP5 International Users Seminar, Baltimore, Maryland, USA, 1994. pp. 1-12.

References

42. **Medvedeva N. Y., Andreev A. V., Peshkov I. et al.**, Multiscale experimental test facilities on RBMK multiple pressure tube rupture problem. Proc. of 6th Int. Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operations and Safety, NUTHOS-6, Nara, Japan, 2004. pp. 1-16.
43. **Wickham A.J.**, Oxidation reactions of graphite in Ignalina RBMK reactors under fault conditions. Jacobsen Engineering report, Jacobsen Engineering, 2005.
44. **Uspuras E., Urbonavičius E., Kaliatka A.** The specifics of RBMK core cooling at overheated conditions // Fourteenth international conference on nuclear engineering ICONE 14, Miami, Florida, USA, July 17-20, 2006. USA: ASME, 2006. ISBN 0-7918-3783-1, p. 1-9.
45. **Van Dorsseleare J.P.**, Overview of progress of ASTEC Topic, Conference ERMSAR-07, Session “Code and method development activities”, Overview of progress of ASTEC Topic, Karlsruhe, 12-14 June 2007.
46. **Urbonavicius E., Uspuras E., Rimkevicius S., Kaliatka A.**, Application of RELAP/SCDAPSIM and COCOSYS Codes for Severe Accident Analysis in RBMK-1500 Reactor, Proceedings of ICAPP '06, Reno, NV USA, June 4-8, 2006, Paper 6174.
47. **Safety substantiation of Reactor Cooling System**, Lithuanian Energy Institute, Kaunas, Lithuania, 1999.
48. **E. Uspuras, A. Kaliatka, V. Vileiniskis**, Development of accident management measures for RBMK-1500 in the case of loss of long-term core cooling, Nuclear Engineering and Design, **236**, 47, 2006.
49. **Technical Support for the Debris Coolability Requirements for Advanced Light Water Reactors in the Utility/EPRI Light Water Reactor Requirements Document**, Fauske & Associates, June 1990.
50. **EU co-sponsored research on reactor safety/severe accidents**, Final summary reports – “Source Term (ST)” cluster projects, EURATOM, EUR 19963, European Commission, Brussels, 2003.
51. **Dutton L.M.C., et al.**, Iodine behaviour in severe accidents, Proceedings of the fourth CSNI workshop on the chemistry of iodine in reactor safety, Wurenlingen, Switzerland, June 10-12, 1996, NEA/CSNI/R(96)6, Nuclear Energy Agency, 1996.

52. **A simplified approach to estimating reference source terms for LWR designs**, TECDOC-1125, International Atomic Energy Agency, Vienna, 1999.
53. **Impact of short-term severe accident management actions in a long-term perspective**, Final report, NEA/CSNI/R(2000)8, Nuclear Energy Agency, 2000.
54. **Libmann J.**, Elements of nuclear safety, Les editions de physique, 1996.