

AGENDA

10th International Workshop on Application of Field Programmable Gate Arrays in Nuclear Power Plants

December 4-6, 2017 in Gyeongju, Republic of Korea

<i>Day 1 – Monday, 4 December 2017</i>		
Time	Event	Speaker
8:00 – 09:00	Registration	
Opening Session		
09:00 – 09:20	Welcome, Introduction & Agenda	Mark Burzynski SunPort SA
09:20 – 9:40	Opening Message from the Host Organization	Kook Hun Kim Doosan
9:40 – 10:00	IAEA Welcome	Janos Eiler IAEA
10:00 – 10:30	Keynote Presentation: FPGA Workshops: A Decade in Review	Mark Burzynski SunPort SA
10:30 – 11:00	Coffee Break	
Technical Session on Systems and Platform Technology		Chair: Anton Andrashov
11:00 – 11:30	Presentation 1: Class 1E FPGA-Based Logic Controller for Nuclear Power Plant	Jin Young Lim Doosan
11:30 – 12:00	Presentation 2: Introduction of Class 1 FPGA Platform for the UK ABWR	Shohei Nakamura Hitachi, Ltd.
12:00 – 12:30	Group Photo	
12:30 – 14:00	Lunch Break	
Technical Session on Systems and Applications I		Chair: Rossnyev Alvarado
14:00 – 14:20	Presentation 3: Recommended Application of FPGAs for I&C Systems in Nuclear Power Plant (CAP1400)	Chen Jianping SNPAS
14:20 – 14:40	Presentation 4: FPGA-Based I&C Products Products Today and Innovative Approaches	Pierre Bazot AREVA NP SAS
14:40 – 15:00	Presentation 5: Use of FPGA Technology in a UK Nuclear Protection System	Cezar Georgescu Horizon
15:00 – 15:30	Presentation 6: An Improved Protection System for Zero SPV and CCF Elimination	Chae Ho Nam Doosan
15:30 – 16:00	Coffee Break	
16:00 – 16:30	Doosan's Demonstration	
16:30 – 17:30	Exhibit & Discussions	

<i>Day 2 – Tuesday, 5 December 2017</i>		
Time	Event	Speaker
Technical Session on Systems and Applications II		Chair: Alain Ourghanlian
09:00 – 9:30	Presentation 7: Design and Implementation of Refueling Machine Simulator Control System Based on FPGA	Zhijun He CNPE
09:30 – 10:00	Presentation 8: Configuration Method of Instrument and Control System Platform Based on FPGA	Jiang Qunxing SNPAS
10:00 – 10:30	Coffee Break	
10:30 – 12:00	1st Panel Discussion on Application Implementation and Technical Issues	Moderator: Sergio Russomanno
12:00 – 13:30	Lunch Break	
Technical Session on Platform Technology		Chair: Mark Burzynski
13:30 – 14:00	Presentation 9: FPGA Applications in Life Extension Projects	Sergio Russomanno SunPort SA
14:00 – 14:30	Presentation 10: NPP Centralized Control System FPGA Controller Architecture	Jordan Mott Doosan HF Controls
14:30 – 15:00	Coffee Break	
Korea Radioactivity Waste Agency Tour		
15:00 – 16:00	Travel to Korea Radioactivity Waste Agency	
16:00 – 17:30	Technical Tour: Radioactive Waste Disposal Plant	
17:30 – 18:30	Return to Hilton Hotel-Gyeongju	
18:30 -	Gala Dinner at Hilton-Gyeongju	

<i>Day 3 – Wednesday, 6 December 2017</i>		
Time	Event	Speaker
Technical Session on Design and Testing		Chair: Gyula Mach
09:00 – 9:30	Presentation 11: Verification and Validation of FPGA-Based Logic Controller	Jang Yeol Kim KAERI
09:30 – 10:00	Presentation 12: Ensuring a Rigorous Design Flow for NPP FPGA Designs	Muhammad Khan OneSpin Solutions
10:00 – 10:30	Presentation 13: Assessment Methodology for the Application of FPGA Based I&C systems in NPPs	Dr. Dagmar Sommer GRS GmbH
10:30 – 11:00	Coffee Break	
Technical Session on Certification, Qualification, and Standards		Chair: Mark Burzynski
11:00 – 11:30	Presentation 14: Licensing of FPGA-Based Safety Platform RadICS: Case Study	Anton Andrashov Radics
11:30 – 12:00	Presentation 15: U.S. NRC Reviews of FPGA-based Systems	Rossnyev Alvarado USNRC
12:00 – 12:30	Presentation 16: Review Plan for FPGA-Based Logic Controller Used in Safety System	Yong-II Kwon KINS
12:30 – 14:00	Lunch Break	
14:00 – 15:00	2nd Panel Discussion on Standards, Qualification, and Assurance	Moderator: Mark Burzynski
15:00 – 15:30	Coffee Break	
Technical Session on Cyber Security and Diversity		Chair: Mark Burzynski
15:30 – 16:00	Presentation 17: Providing Cyber Security for FPGA-Based Applications	Kostiantyn Leontiev Rady
16:00 – 16:30	Presentation 18: The Application of FPGA-based FitRel Platform in Nuclear Power Plant Diverse Actuation System	Yinjie Chen CTEC
Closing		
16:30 – 17:00	Final Discussion on Recommendations and Future Activities	Mark Burzynski SunPort SA
17:00 – 17:10	Closing the Meeting	Chae Ho Nam Doosan