

TENTATIVE AGENDA

11th International Workshop on Application of Field Programmable Gate Arrays in Nuclear Power Plants

October 8-11, 2018 in Dallas, Texas

Organized by SunPort SA and hosted by Doosan HF Controls.

<i>Day 1 – Monday, 8 October 2018</i>		
Time	Event	Speaker
8:00 – 9:00	Registration	
Opening Session		
9:00 – 9:15	Welcome, Introduction & Agenda	Mark Burzynski SunPort SA
9:15 – 9:45	Message from the Host Organization	Steve Yang, Doosan HF Controls
9:45 – 10:30	IAEA Activities in the Field of Nuclear I&C Engineering	Janos Eiler IAEA
10:30 – 11:00	Coffee Break	
11:00 – 11:45	Invited Presentation 1	Kook Hun Kim
11:45 – 12:30	Invited Presentation 2: Breaking Down Regulatory and Implementation Barriers to the Application of Digital Control and Safety Systems	Jason Remer NEI
12:30 – 14:00	Lunch Break	
Technical Session on V&V Best Practices		Chair: xxxxxxxxxxxxxxxxxxxx
14:00 – 14:30	Presentation 1: Logic Automation Tool One-Step Qualification Process	David Briner Doosan HFC
14:30 – 15:00	Presentation 2: Acceptable Framework Through Use of IEEE Std-1012 and IEC Std-62566 on FPGA.	Jang Yeol Kim KAERI
15:00 – 15:30	Presentation 3: KINS Regulatory Experience in Using Standards for FPGA System Reviews	Yongil Kwon KINS
15:30 – 16:00	Coffee Break	
16:00 – 16:45	Presentation 3: TBD	David Hooten Imperia Engineering
16:45 – 17:30	Presentation 4: GE's Experience with V&V Using Various International Standards (tentative)	Greg Dobra GE
17:30 – 19:00	Exhibits & Discussions	

<i>Day 2 – Tuesday, 9 October 2018</i>		
Time	Event	Speaker
8:45 - 9:00	Welcome, Introduction & Agenda	Mark Burzynski SunPort SA
9:00 – 9:45	Invited Presentation 3: Formal Verification for Safety-Critical Applications of FPGAs	Tom Anderson OneSpin
9:45 – 10:30	Invited Presentation 4: UK’s Experience with V&V of FPGA Technology (tentative)	Dr. Andrew White UK - ONR
10:30 – 11:00	Coffee Break	
11:00 – 11:45	Presentation 5: Radiy experience with RadICS Platform SIL 3 certification: adaptation of FPGA V-model to IEC 61508 requirements and using of FIT to validate FMEDA results	Kostiantyn Leontiiiev RPC Radiy
11:45 – 12:30	Presentation 6: Recent developments in IEC standards and the use of FPGAs at EdF	Alexander Wigg EdF
12:30 – 14:00	Lunch Break	
14:00 – 15:30	Workshop Discussion on V&V Best Practices	Moderator: xxxxxxxxxxxxxxxx
15:30 – 16:00	Coffee Break	
Technical Session on Practical Experiences from FPGA Projects		Chair: xxxxxxxxxxxx
16:00 – 16:30	Presentation 7: Design and Development of a Simplified DNBR Calculation Algorithm Using FPGA	Ibrahim Fathy Awad KINGS - KEPCO
16:30 – 17:00	Application of FPGA Technology in Nuclear I&C Products	Hu Yiwu CNCS
17:00 – 17:30	Presentation 8: Cyber Security Program Implementation for FPGA Applications	Yin Guo Doosan HFC
17:30 – 18:00	Break	
18:00 – TBD	Social Event (to be announced)	

<i>Day 3 – Wednesday, 10 October 2018</i>		
Time	Event	Speaker
8:45 - 9:00	Welcome, Introduction & Agenda	Mark Burzynski SunPort SA
Technical Session on Practical Experiences from FPGA Projects		Chair: xxxxxxxxxxxx
9:00 – 9:45	Presentation 9: Use of FPGAs for Real-Time Nuclear Power Display and Monitoring Applications	Brian Arnholt NuScale Power
9:45 – 10:30	Presentation 10: Presentation: Scalability of the HIPS Platform	Gregg Clarkson Rock Creek Innovations
10:30 – 11:00	Coffee Break	
11:00 – 11:45	Presentation 11: HFC-FPGA System EQ Lessons Learned	Eugene O'Donnell Doosan HFC
11:45 – 12:30	Presentation 12: RadICS System EQ Testing: Results and Lessons Learned	Anton Andrashov Radics LLC
12:30 – 14:00	Lunch Break	
14:00 – 14:30	Presentation 13: V&V Testing of FPGA-Based I&C Platform	Xiaoli Huai CNCS
14:30 – 15:00	Presentation 13: Introduction of Class 1 FPGA Platform for the UK ABWR	Toru Motoya Hitachi
15:00 – 15:30	Presentation 14: Design and Diversity Requirements for an FPGA System	Zhang Zhiliang CNPE
15:30 – 16:00	Coffee Break	
Technical Session on Practical Experiences from FPGA Projects		Chair: xxxxxxxxxxxx
16:00 – 17:15	Workshop Discussion on Practical Experiences from FPGA Projects	Moderator: xxxxxxxxxxxxxx
17:15 – 17:30	Group Photo	
17:30 – 18:00	Break	
18:00 – TBD	Social Event (to be announced)	

<i>Day 4 – Thursday, 11 October 2018</i>		
Time	Event	Speaker
8:45 - 9:00	Welcome, Introduction & Agenda	Mark Burzynski SunPort SA
Technical Session on Use of Diversity in FPGA-Based Systems		Chair: xxxxxxxxxxxxxx
9:00 – 9:45	Presentation 15: Diversity application of FPGA-based FitRel platform in Yangjiang Unit 5 NPP	Chen Yinjie CTEC
9:45 – 10:30	Presentation 16: Presentation: Diversity of the HIPS Platform (tentative)	Jason Pottorf Rock Creek Innovations
10:30 – 11:00	Coffee Break	
11:00 – 11:45	Presentation 17: Use of NUREG/CR-7007 to Assess Internal Diversity of an FPGA-Based Platform	Sean Kelley SunPort
11:00 – 12:00	Panel Discussion on Use of Diversity in FPGA-Based Systems	Moderator: xxxxxxxxxxxxxxxx
12:00– 13:00	Final Discussion on Recommendations, Future Activities, and Closing the Meeting	Mark Burzynski SunPort SA
13:00 - TBD	Social Program in the City (to be announced)	