



Polish industry for nuclear power sector

# TECHNICAL WORKSHOPS

## Quality issues

October 6-8, WARSAW			
GROUP: CIVIL WORK			
Day	Hour	Topic	Expert
Room 1			
6th October, Monday	7:30 - 8:00	Coffee break	
	8:00 - 9:00 (1 h)	Welcome Presentation of Experts Introduction	Warsaw University of Technology Poland
	9:00 - 10:30 (1,5 h)	Civil works in the nuclear sector. Requirements for quality assurance and quality control 1) the level of inspection of the supply chain, including the issue of a third party (the so-called notified body) 2) dual use 3) accreditation of certification laboratories	Warsaw University of Technology Poland
	10:30 - 10:45	Coffee break	
	10:45 - 12:15 (1,5 h)	<b>MODULE A: ISSUES RELATED TO STANDARD: ISO 19 443 : 2018 and NQA-1</b> 1) Presentation of standard 2) Differences between ISO 19 443 and ISO 9001 3) Actions and procedures necessary for implementation of ISO 19 443 in Polish industrial manufacturing, engineering and civil construction Contractors 4) Rules of implementation and practicing of Nuclear Safety Culture and Nuclear Quality Culture within ISO 19 443 context and considering the IAEA Harmonized Safety Culture Model 5) implemenation and costs of certification	BUREAU VERITAS Belgium, Poland
	12:15 - 13:15	Lunch	
	13:15 - 15:15 (2 h)	<b>MODULE B: EXPERIENCES OF THE GENERAL CONTRACTOR</b> 1) The experience of the general contractor on classifications, Safety classes, supply chain, nuclear regulator relations, quality and safety culture	BECHTEL USA
	15:15 - 15:30	Coffee break	

	<b>15:30 - 17:30 (2 h)</b>	<b>MODULE C: American norms and standards:</b> ACI, ASME, ANSI, ANS Case studies of applications in nuclear projects	<b>Warsaw University of Technology Poland</b>
	<b>Room 1</b>		
<b>7th October, Tuesday</b>	<b>7:30-8:00</b>	<b>Coffee break</b>	
	<b>8:00 - 10:00 (2 h)</b>	<b>MODULE D: Presentation of CFSI issues:</b> counterfeit, fraudulent and suspicious items 1) General presentation of CFSI concept 2) Measures against fraud and counterfeiting in the nuclear environment (CFSI), 3) Numerous illustrations and concrete examples	<b>BUREAU VERITAS Belgium, France</b>
	<b>10:00 - 10:15</b>	<b>Coffee break</b>	
	<b>10:15 - 12:15 (2 h)</b>	<b>MODULE E GRADED APPROACH</b> 1) Implementation of Graded Approach principle for terms and conditions for qualification of products, services 2) Examples of implementation of GRADED APPROACH 3) Implementation of Graded Approach principle for iconic solutions in regard of inspecting of supply chain – subcontractors level; 4) Rules for implementation and practicing of so called “safety culture” and “nuclear quality” in regard of GRADED APPROACH context.	<b>BUREAU VERITAS France, Poland</b>
	<b>12:15 - 13:15</b>	<b>Lunch</b>	
	<b>13:15 - 15:15 (2 h)</b>	<b>MODULE F: EXPERIENCES OF THE MAIN SUBCONTRACTOR - PART I</b> technical requirements, internal procedures, practical experiences, certification 1) current status of work on the AP1000 project in Poland 2) contruction overview 3) organization of the contruction process	<b>BECHTEL USA</b>
	<b>15:15 - 15:30</b>	<b>Coffee break</b>	

	15:30 - 17:30 (2 h)	<b>MODULE G: MEGA PROJECTS / NUCLEAR PROJECTS MANAGEMENT</b> 1) Fundamental notions on Nuclear Project Management 2) Leadership functions incl. Independent Nuclear Safety challenge and advise function 3) Efficient work sequences; 4) Insight into all main stages from the preparatory phase to plant turnover to commissioning. including Ageing Management Program 5) The international lessons learned: CASE STUDIES: two successful projects	<b>BUREAU VERITAS</b> France, USA
<b>Room 1</b>			
8th October, Wednesday	7:30 - 8:00	Coffee break	
	8:00 - 10:00 (2 h)	<b>MODULE H: EXPERIENCES OF THE MAIN SUBCONTRACTOR - - PART I</b> technical requirements, internal procedures, practical experiences, certification 1) current status of work on the AP1000 project in Poland 2) contruction overview 3) organization of the contruction process	<b>BECHTEL</b> USA
	10:00 - 10:15	Coffee break	
	10:15 - 12:15 (2 h)	<b>MODULE I: ACI 349 vs ACI 318</b> 1) Application of international and US nuclear engineering standards: ACI 349, ACI 318 and EC2 2) ACI 349 vs ACI 318 part 1	<b>ACI</b> USA
	12:15 - 13:15	Lunch	
	13:15 - 15:15 (2 h)	<b>MODULE J: INVESTOR EXPERIENCE</b> 1) Relationships between the nuclear regulator, the investor and the supply chain 2) Quality assurance down the supply chain", including nuclear culture control (so-called "nuclear safety culture")	<b>BUREAU VERITAS</b> Belgium
	15:15 - 15:30	Coffee break	

	<b>15:30 -16:30</b> <b>(1 h)</b>	<b>MODULE K: BIM, CDE</b> 1) BIM solutions for AP1000 Project 2) CDE (common data environment)	<b>Polskie Elektrownie Jądrowe (PEJ)</b> <b>Polska</b>
	<b>16:30 -17:30</b> <b>(1 h)</b>	<b>MODULE L: SMR's supply chain</b> Supply chain for SMRs - qualification procedure - how to become a qualified subcontractor for the nuclear sector	<b>GE Vernova Hitachi Energy</b> <b>USA</b>
	<b>17:30 - 18:00</b>	<b>SUM UP OF THE WORKSHOP</b> Open Questions DIPLOMAS	