PROGRAMME



The 2024 Workshop on Nuclear Supply Chain: Assurance Today, Confidence Tomorrow

5-6 March 2024

BB Auditorium, NEA Headquarters Boulogne-Billancourt France





Practical information on the workshop

The workshop will take place at the

BB Auditorium, OECD Nuclear Energy Agency offices 46, Quai Alphonse Le Gallo, 92100, Boulogne-Billancourt, France

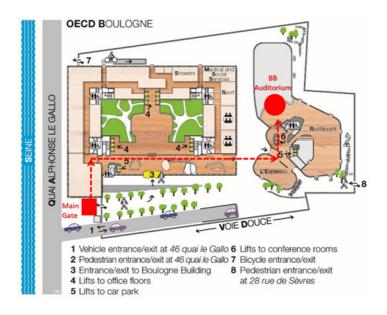
On 5-6 March 2024, starting at 9 AM.

Building access

Please plan to arrive at the OECD Nuclear Energy Agency offices (address above) at least 30 minutes before the workshop start time to allow sufficient time to access the building.

Participants must be registered by the NEA Secretariat to enter the building. A photographic identity document (i.e. a passport or nationally issued ID) needs to be shown to security. If you receive a QR code before the workshop, you may display this along with your ID. If you do not receive a QR code, it is sufficient to show your ID to security.

Next, please proceed to the reception desk to receive a building pass (badge). You may then need to do a security check. After entering the building, please follow the signage to the BB Auditorium located outside the main building on the first floor. Please see the map below.



Transport

The OECD NEA Headquarters can be accessed by Paris Metro: Line 10, Pont de Saint-Cloud station (10 minutes by foot) and Line 9, Pont de Sèvres station (15 minutes by foot). For further transportation information, consult the RATP website at www.ratp.fr/en.

Lunch

Lunch is not provided as part of the workshop. Participants can order lunch via "Refectory" (on their app or website, www.refectory.fr/en), a convenient click-andcollect food service that delivers freshly prepared meals directly to the cafeteria. Please select OECD Boulogne-Billancourt as your location. Orders can be placed up to five working days in advance and as late as 10:30 on the day of delivery. Without ordering lunch using the Refectory, you can purchase your lunch directly at the cafeteria. There are some choices for foods, beverages and cookies. You can pay for them with your credit card. The cafeteria has over twenty (20) microwaves for heating foods.

Context of the workshop

The outlook for nuclear power has significantly improved in the past few years. The Nuclear Energy Agency (NEA), the International Atomic Energy Agency (IAEA), the International Energy Agency (IEA) and the World Nuclear Association (WNA) all expect an increase in global nuclear capacity by 2050 compared to today.

While the need for gigawatt-scale reactors continues, there is a new focus on small modular reactors (SMRs) in some regions. The scale of SMR deployment will depend on the success in delivering first-of-a-kind projects and in the industrialisation and modularisation of manufacturing and supply chain activities.

Thus, the ability of the nuclear industry and other stakeholders to meet this new demand for energy will depend on several factors, including the capacity to manufacture and deliver the required quantity and quality of equipment for both existing nuclear power plants and new build needs.

Background

Suppliers play a critical role in the construction and operation of nuclear power plants. With a declining number of nuclear grade suppliers and a loss of skills in some regions, supply chain oversight raises specific challenges that require regulators to adopt new practices and increase co-operation. In this context, the newly established NEA Working Group on Supply Chain (WGSUP) will organise a workshop to build on the Agency's previous work in the field of nuclear supply chains and to discuss the latest challenges.

Objectives

Building on the 2018 Workshop on Nuclear Supply Chain Management, sponsored by the NEA's Committee on Nuclear Regulatory Activities and the Multinational Design Evaluation Programme, the 2024 workshop will address the latest challenges related to supply chain oversight practices and will examine potential risks that the nuclear industry will need to consider to ensure safe and reliable nuclear operations.

The workshop is organised in partnership with the World Nuclear Association (WNA) and International Atomic Energy Agency (IAEA) to align, where appropriate, the improvement and oversight activities of the industry, the regulators and standards development organisations (SDOs). The event will gather representatives from government and regulatory bodies, industry and technical support and standards development organisations.

The workshop will take place on 5-6 March 2024 and will be structured around the following four sessions, which will include keynote speeches from industry leaders and insights from other relevant industries:

(Session 1) Supply chain management: This will focus on the challenges associated with geopolitical developments and the COVID-19 pandemic and will examine how the industry and regulators have adapted to mitigate current and future risks. This session will also discuss the strategic planning needed to ensure that supply chains are future-proofed against potential shocks.

(Session 2) New challenges related to SMRs: This will consider how industry and regulators are addressing the supply chain management opportunities and risks associated with SMRs. Participants will discuss the modularisation of construction, capability challenges associated with new entrants and potential adoption of commercial-grade items. This session will be co-ordinated with the IAEA's Small Modular Reactors' Forum and Nuclear Harmonisation and Standardisation Initiative (NHSI).

(Session 3) Quality delivery: This will focus on the impact of advanced manufacturing and commercial-grade procurement arrangements in the management systems of licensees and vendors. The session will also examine the continued risks associated with counterfeit and fraudulent activities and potential methods to mitigate risks in a constantly changing environment. The development and adoption of industry-specific quality standards (e.g. ISO 19443) will be considered, as well as the role that the standards play in enabling quality delivery and supporting safe and reliable operations.

(Session 4) Organisation culture: This will explore how the development of an appropriate organisational culture can support safe and reliable delivery, and therefore operations, and will discuss the importance of nuclear safety culture within licensees. The session will also focus on quality culture among the supply chain participants who might not be aware of the product's or assembly's ultimate safety function in the nuclear facility.

The workshop will also feature panels and Q&A sessions to include audience perspectives of key risks, challenges and opportunities.

Outcomes

The NEA Committee on Nuclear Regulatory Activities (CNRA) will publish the workshop proceedings after the event to support dissemination of the key messages.

The organisation of the workshop was co-ordinated by:

Julien Collet	ASN, France (Workshop Chair and CNRA Vice-Chair)
Jeremy Hubert	ASN, France (WGSUP Chair)
Dan Papaz	CNSC, Canada (WGSUP Vice-Chair)
Stuart Allen	ONR, United Kingdom
Kerri Kavanagh	NRC, United States
Pekka Pyy	IAEA
Nathan Paterson	WNA
Sangmin Lee	NEA (Technical Secretariat)
Keiko Chitose	NEA (Technical Secretariat)
Stephanie Ruiz	NEA (Events and Administrative Coordinator)

The workshop is hosted by



Nuclear Energy Agency (NEA)

The NEA is the only intergovernmental agency which brings together a selection of countries from the Americas, Europe and the Asia-Pacific region in a nonpolitical forum dedicated to sharing and disseminating state-of-the-art knowledge in the field of nuclear energy.

For more information, visit www.oecd-nea.org.

The workshop is organised in partnership with



International Atomic Energy Agency (IAEA)

Widely known as the world's "Atoms for Peace and Development" organisation within the United Nations family, the IAEA is the international centre for co-operation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

For more information, visit <u>www.iaea.org</u>.



World Nuclear Association (WNA)

The Association's mission is to promote a wider understanding of nuclear energy among key international influencers by producing authoritative information, developing common industry positions, and contributing to the energy debate.

For more information, visit http://world-nuclear.org.

The workshop is supported by



Doosan Enerbility

Over the past 60 years, Doosan Enerbility has contributed to Korea's economic growth by participating in the local manufacturing and overseas export business of industrial plants, including power plants, desalination plants, castings and forgings and construction work. Having been the largest global supplier of nuclear power plant components for the past 40 years, Doosan Enerbility holds expertise in the design and manufacturing of nuclear components.

For more information, visit www.doosanenerbility.com.

Day 1 – Tuesday, 5 March 2024

8:00-9:00	Registration
	BB Auditorium
Opening ses	ssion
9:00-9:30	
9:00-9:30	Welcome and introductory remarks
	Julien Collet, Deputy Director General, Nuclear Safety Authority (ASN), France, and workshop Chair
	William D. Magwood, IV, Director-General, Nuclear Energy Agency (NEA)
Keynote ses	sion 1
9:30-9:50	
9:30-9:50	Turning net zero targets into global nuclear supply chain action
	Sama Bilbao y León, Director General, World Nuclear Association (WNA)
Session 1 -	Supply chain management
9:50-12:30	
The session considers the challenges associated with geopolitical and pandemic issues and how industry and regulators can and have adapted their approaches to mitigate current and future risks. It addresses the need for strategic planning to stimulate supply chain readiness to future-proof against potential supply chain shocks and make the most of new opportunities.	

9:50-10:00	Introduction of session 1 Moderator: Nathan Paterson (WNA) Rapporteur: Dan Papaz (CNSC)
10:00-10:20	How to build a reliable nuclear supply chain in a growing market? Alice Aubert, VP Nuclear Industrial Policy, EDF, France
10:20-10:40	Rolls-Royce SMR: Supply chain development for fleet deployment Rich Everett, Group Head of Supply Chain, Rolls-Royce SMR, United Kingdom
10:40-11:00	Coffee break and group picture

11:00-11:20	Global supply chain supporting customer vision Salvatore Micciche, Director of Global Procurement Program Management, Westinghouse Electric Company, Belgium
11:20-11:40	BWRX-300 supply chain: Strategy, localisation and opportunities
	Tim Check, Global Supply Chain Leader – BWRX-300, GE-Hitachi Nuclear Energy, United States
11:40-12:20	Panel discussion
	Panellists: Moderator and all speakers
12:20-12:30	Interactive session 1 (SLIDO)
12:30-14:00	Lunch break

Session 2 – New challenges of small modular reactors 14:00-17:00

This session aims to consider how industry and regulators are developing arrangements to address the supply chain management opportunities and risks associated with small modular reactors. It will include the modularisation of construction, capability challenges associated with new entrants and the potential adoption of commercial-grade items.

14:00-14:15	Introduction of session 2
	Moderators: Kerri Kavanagh (NRC) and Pekka Pyy (IAEA)
	Rapporteurs: Joung Gun Yeon (KINS) and Daniel Clapa (PAA)
14:15-14:35	Small Modular Reactor Regulators' Forum (SMR RF) Brian Smith, Chair of SMR Regulator Forum, Nuclear Regulatory Commission (NRC), United States
14:35-14:55	IAEA Nuclear Harmonisation and Standardisation Initiative (NHSI) – How to make nuclear simpler?
	Pekka Pyy, Senior Expert, International Atomic Energy Agency (IAEA)
14:55-15:15	Small modular reactors – Transformation of the nuclear supply chain
	Damien Drocourt, Chief Officer of Procurement and Supply Chain, NUWARD, France
15:15-15:35	Opportunities and risks for SMR deployment
	Donghwa Lee, Director of SMR Design Team, Doosan Enerbility, Korea
15:35-15:55	Coffee break

15:55-16:45	Panel discussion Panellists: Moderators and all speakers
16:45-17:00	Interactive session 2 (SLIDO)
18:00-20:00	Reception
20:00	End of day 1

Day 2 – Wednesday, 6 March 2024

Keynote ses 9:00-9:30	sion 2
9:00-9:30	Enhance the co-operation and co-ordination of supply chain stakeholders to improve the competitiveness of nuclear power plants
	Fuming Jiang, Head of Operational Safety, International Atomic Energy Agency (IAEA)
	Some considerations about the nuclear supply chain and nuclear workforce
	Oliver Martin, Project Leader of Long-Term Operation of Light Water Reactors, European Commission – Joint Research Centre (EC-JRC)
Session 3 -	Quality delivery
9:30-12:30	

The objective of this session is to consider how the development of advanced manufacturing and commercial-grade procurement arrangements will impact the management systems of licensees and vendors. This session will consider how ISO 19443 is used to improve quality and to detect and prevent CFSI.

9:30-9:40	Introduction of session 3 Moderator: Jeremy Hubert (ASN) Rapporteurs: Jean-Baptiste Toureau (ASN) and Yusuke Kasagawa
	(NRA)
9:40-10:00	Al for knowledge and quality management
	Nawal K Prinja, Technology Director, Jacobs, United Kingdom
10:00-10:20	Commercial-grade item dedication today
	Marc H. Tannenbaum, Senior Technical Executive, Electric Power Research Institute (EPRI), United States
10:20-10:40	Coffee break
10:40-11:00	KHNP CFSI verification
	Young-Ho Shin, Senior Manager, Korea Hydro & Nuclear Power (KHNP), Korea
11:00-11:20	Principles to secure quality towards more rigorous supply chain
	Marilou Lebeault, Quality Manager for Accredited Inspection Body, Framatome, France

11:20-12:10	Panel discussion
	Panellists: Moderator and all speakers
12:10-12:30	Interactive session 3 (SLIDO)

Session 4 – Organisation culture 14:00-17:00

This session aims to consider how the development of an appropriate organisational culture can support safe and reliable delivery and operations. It will explore the importance of the nuclear safety culture (SC) of licensees and will include a focus on quality culture in the tiers of the licensee's SC where the understanding of the product or assembly's ultimate safety function in the nuclear facility might not be clearly understood.

14:00-14:10	Introduction of session 4 Moderator: Stuart Allen (ONR)
	Rapporteurs: Zafer Bayram (NDK) and Kevser Öney (NDK)
14:10-14:30	Perspectives on organisational culture
	Marc McBride, Leadership and Management for Safety Specialism Lead, ONR, United Kingdom
14:30-14:50	Establishing nuclear safety culture in the Hinkley Point C new build supply chain
	Chris Quinn, Supply Chain Director of HPC and EPRP (SZC), EDF Nuclear, United Kingdom
14:50-15:10	KELPO – Establishing the correct quality culture in delivery of standard equipment to the nuclear industry
	Teemu Kelavirta, Technical Design and Engineering Manager, Fortum, Finland
15:10-15:30	Activities to cultivate nuclear safety culture and to prevent falsification of sub-tier suppliers
	Takashi Kurisaki, Project Quality Assurance Manager for ITER Project, MHI, Japan
15:30-15:50	Coffee break
15:50-16:40	Panel discussion
	Panellists: Moderator and all speakers
16:40-17:00	Interactive session 4 (SLIDO)

Closing sessi 17:00-18:00	on
17:00-17:40	Summary of the sessions
	All session moderators
	Jeremy Hubert, Working Group on Supply Chain (WGSUP) Chair
17:40-18:00	Concluding remarks
	Véronique Rouyer, Head of the Division of Nuclear Safety Technology and Regulation, Nuclear Energy Agency (NEA)
	Julien Collet, workshop Chair and Committee on Nuclear Regulatory Activities (CNRA) Vice-Chair
18:00	End of the workshop

Speaker biographies – Opening session



Julien COLLET joined the French Nuclear Safety Authority (ASN) in July 2004 and has since held various positions in nuclear safety and environmental protection. In December 2014, he was appointed as Deputy Director-General of ASN, overseeing activities related to nuclear power plants. Before that he was Head of the Environment and Emergency Preparedness Department between April 2008 and March 2011, and Head of the South-West regional office between July 2004 and June 2008.

He is vice-chair of the Committee on Nuclear Regulatory Activities (CNRA) of the NEA.



William D. MAGWOOD, IV, took up his duties as Director-General of the NEA on 1 September 2014. He has extensive experience in both the regulatory and developmental aspects of nuclear energy, including at the international level. From 2010 to 2014, he served as one of the five Commissioners appointed by the US President and confirmed by the US Senate to the US Nuclear Regulatory Commission (NRC). While a commissioner, he advocated the importance of nuclear regulatory independence and the necessity of maintaining strong, credible and technically sound nuclear regulation in the United States and all countries that use nuclear power.

Prior to his appointment at the NRC, from 2005 to 2010 he provided independent strategic and policy advice to US and international clients on energy, environmental and technology policy issues. During this time, he also sat on various advisory groups and provided technical and policy advice to members of the US Congress on nuclear research, education and climate change policy.

From 1998 to 2005, Mr Magwood was Director of Nuclear Energy at the US Department of Energy (DOE). During his tenure, he launched several important initiatives, including the US Nuclear Power 2010 programme and the Generation IV International Forum (GIF). He was also actively involved in the work of the NEA, serving as a Steering Committee bureau member from 1999 to 2003, and as Chair in 2004 and early 2005.

Prior to his experience at the DOE, Mr Magwood managed electric utility research and nuclear policy programmes at the Edison Electric Institute in Washington, DC, and was a scientist at Westinghouse Electric Corporation in Pittsburgh, Pennsylvania.

Mr Magwood, a US national, holds Bachelor's degrees in physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.

Speaker biography – Keynote session 1



Sama Bilbao y León became Director General of World Nuclear Association in October 2020. The World Nuclear Association is the international organisation that represents the global nuclear industry.

In this role, Sama leads a team of experts, analysts and communicators working to enable the growth of the global nuclear sector by connecting players across the nuclear value chain, shaping and representing the industry's position in key world forums, providing authoritative information and influencing key audiences, organisations and media.

Sama is also President of World Nuclear University, dedicated to inspire and develop the future leaders of the global nuclear industry. Sama has more than 20 years of experience in nuclear engineering and energy policy.

Sama has a diverse professional experience, having worked in the nuclear industry (Nuclear Safety Analysis Engineer, Dominion Energy, United States), in academia (Director of Nuclear Engineering Programs and Associate Professor at the Department of Mechanical and Nuclear Engineering, Virginia Commonwealth University, United States) and in international organisations (Head of the Division of Nuclear Technology Development and Economics at the NEA, Head of the Technical Secretariat for the Generation IV International Forum, or GIF, and Head of Water Cooled Reactors Technology Development Unit, International Atomic Energy Agency).

Sama, who is originally from Spain, holds a Bachelor's degree in Mechanical Engineering and a master's degree in Energy Technologies from the Polytechnic University of Madrid; a master's degree and a PhD in Nuclear Engineering and Engineering Physics from the University of Wisconsin – Madison; and an MBA from Averett University. Sama is one of the seven founders of the North American Young Generation in Nuclear (NA-YGN).

Sama's areas of expertise are nuclear thermal hydraulics for both light water reactors and sodium cooled reactors, nuclear reactor design, nuclear safety, energy and environmental policy and complex decision making.

Speaker biographies – Session 1



Nathan PATERSON joined the World Nuclear Association in 2021 as the Senior Programme Lead for Supply Chain, responsible as staff director for both the Supply Chain and Security thematic areas.

His focus is on enabling the conditions for a robust, competitive and adaptive supply chain in support of existing nuclear power plants and new build (GW scale, SMR, Micro). This includes areas for such as the business environment, localisation-globalisation approaches, adoption of industrial innovation and delivering on quality. He interfaces with activities within international organisations such as IAEA, WANO, OECD NEA, NQSA and serves on various international committees and working groups.

He has more than 15 years of experience in nuclear systems engineering, design verification, supply chain management and business development. He has worked at major suppliers and integrators such as BAE Systems and Rolls-Royce covering naval nuclear reactors and civil nuclear.

He was also for three years the Senior Technology Advisor at FORATOM (the European nuclear trade association now known as Nucleareurope) in Brussels, where he was responsible for industry and EU policy engagement on innovation, research and development and supply chain optimisation. He also delivered industrial positions and guidance documentation in support of cost competitiveness, quality and innovation.



Alice AUBERT is VP for Industrial Policy in the nuclear business with EDF and is currently in charge of co-ordinating the long-term purchasing strategy for the French nuclear fleet maintenance and renovation needs and new build projects, in France and abroad. She also plays a role in supporting the development of the French nuclear supply chain, in close relationships with the GIFEN, government services and other main contractors.

Before that, she was involved in the Flamanville 3 EPR construction project team, first on the Framatome side on mechanical and piping affairs and then on the EDF side on wider Balance of Nuclear Island activities.

She started her career in strategy consulting with the Boston Consulting Group, with an early focus on Energy topics. At BCG, she worked extensively across Europe from the Paris office on a wide range of projects including strategic portfolio definition, operational excellence, due diligences, new products development.

She spent three years in Istanbul developing the Energy Practice in the area.

She has a general engineering background with a nuclear focus, having received a Master's degree from Mines Paris – PSL Engineering school.



Rich EVERETT is Group Head of Supply Chain for Rolls-Royce SMR with responsibility for all aspects of purchasing, supply chain strategy development and management.

Rolls-Royce SMR is providing solutions to the global energy challenge by taking a different approach to tried and tested nuclear technology. Its "factory-built" nuclear power plant will provide enough low-carbon electricity to power more than a million homes for 60 years.

Rich has over 30 years' experience in the nuclear sector including across the Rolls-Royce's Nuclear (Civil and Submarines), Surface Ship and Gas Turbine businesses. He is a recognised authority with respect to business management, programme management, procurement and supply chain management and development.

Rich is a Member of the Chartered Institute of Procurement and Supply and is focused on the development and implementation of best practice within strategic supply chain development. Within the sector, he has extensive experience in supply chain management techniques and processes.



Salvatore MICCICHE is the Director of Global Procurement Program Management at Westinghouse Electric Company.

He has over 25 years of experience within procurement and has for 20 years acted as a global leader.

He has served different international and multi-cultural industrial businesses (Sogefi Group, Hamon Thermal, Electrolux, Ingersoll Rand, and, for the last two years, Westinghouse Electric). He has helped global organisations to rapidly achieve more efficient and more effective operations and increase business impact. With deep expertise in global procurement, he transformed and guided enterprise procurement teams towards operational excellence model where strategy, technology and operations are combined, and delivered growth, margin expansion and helped develop a culture of success.



Timothy CHECK is the Global Supply Chain Leader – BWRX-300 for GE Vernova's Nuclear business, GE-Hitachi Nuclear Energy (GEH), a world leader in new plant technology, fuels and services.

Tim joined GEH's Advanced Nuclear Sourcing organisation in 2008 and has been involved in expanding the company's global supply chain, the development of new suppliers and the creation of localised supply chains for new plant opportunities. Prior to joining GEH, Tim worked for GE Gas Turbines, GE Switchgear and GE Healthcare in a variety of manufacturing engineering and management positions.

Tim earned a Bachelor of Science degree in Industrial Engineering from Virginia Polytechnic Institute and State University (Virginia Tech) and a Master's Degree in Business Administration from Villanova University.

Speaker biographies – Session 2



Kerri KAVANAGH has been with the US Nuclear Regulatory Commission for over 30 years. Ms Kavanagh currently is the branch chief of the Quality Assurance and Vendor Inspection Branch, DRO/NRR and has served in the role since 2011.

She serves as one of the NRC representatives supporting the development of the American Society of Mechanical Engineers (ASME) Codes and Standards, Section III, Section XI, and NOA-1, and several ASME accreditation committees.

Ms Kavanagh serves as the NRC representative to the Committee on Nuclear Regulatory Activities (CNRA) Working Group on Supply Chain (WGSUP), and the chair of the SMR Regulator' Forum Manufacturing, Construction, Commissioning and Operations Working Group.



Pekka PYY is a Senior Expert at the International Atomic Energy Agency (IAEA).

Mr Pyy holds an MSc in the area of nuclear engineering and Ph.D. in the area of risk assessment and reliability engineering from the LPR University of Technology in Finland (Finland). He has almost 40 years of experience in nuclear industry both with nuclear companies and projects (Olkiluoto 3 and 4), TSOs (VTT) and international organisations. Dr Pyy has, for example, worked in JRC Ispra (1989-90), the NEA (2002-2007) and the IAEA (2015-present).

He holds the position of Senior Expert at the IAEA Division of Nuclear Power. Topics of management, quality and supply chain belong to his areas of work. Dr Pyy leads the Nuclear Harmonization and Standardization (NHSI) Industrial Track Topical Group 2 "Common Approaches on Codes and Standards" especially focusing on neardeployment SMRs.



Brian SMITH is the Chair of SMR Regulator Forum, Nuclear Regulatory Commission (NRC) in the United States.

Mr Smith joined the US Nuclear Regulatory Commission (NRC) in 1996 as a Health Physicist in the Office of Nuclear Material Safety and Safeguards (NMSS). In 2003, he was selected as a Branch Chief in NMSS in the Division of Fuel Cycle Safety, Safeguards, and Environmental Review (FCSE). In 2017, he was selected for the Senior Executive Service position of Deputy Director, NMSS/FCSE. He served in this role until his selection in January 2019 as the Deputy Director of the Division of Engineering in NRR. In October 2019, Mr Smith was selected as the Deputy Director of the Division of Advanced Reactors and Non-Power Production and Utilization Facilities (DANU) in NRR, where he served until starting his position as the Director of DNRL in September 2021.

Prior to joining the NRC, Mr Smith worked for 4 years for a small company consulting to the Department of Energy in the area of radiation protection regulations and guidance. Mr Smith earned a Bachelor's degree in Nuclear Engineering from North Carolina State University.



Damien DROCOURT is the Chief Officer of Procurement and Supply Chain at NUWARD in France.

Damien Drocourt started his career as Assistant Project Manager in the oil and gas sector and then become Project Manager for electrical and I&C fields for various projects in the gas and water treatment sector.

He joined EDF in 2012 as Project Manager for the Electrical installations of the Hinkley Point C (HPC) project. He then spent five years in the United Kingdom as programme manager, leading the engineering, procurement and manufacturing for the mechanical, electrical and HVAC contracts of HPC.

Damien joined the NUWARD project in 2022 as Procurement and Supply Chain Chief Officer.

Damien graduated from the Université de Belfort Montbéliard in France.



Donghwa LEE is the director of the SMR design team at Doosan Enerbility. He has more than 16 years of experience in nuclear equipment engineering and design with Doosan, 13 years as an equipment/component design manager/engineer, 1 year as a site CVAP inspector, and 2 years as a manufacturing design of SMR management engineer. To date, he has supported a total of 16 nuclear projects, 10 domestic projects and 6 overseas projects. His design and engineering expertise includes:

- manufacturing design of overseas AP1000 reactor internals;
- component and manufacturing design of domestic OPR1000 and APR1400 reactor vessel and internals;
- development of the CVAP Program for APR1400;
- development of the reactor vessel and internals for the APR Plus Reactor;
- participation in manufacturability assessment service of design for SMR.

He earned a Bachelor's degree in nuclear engineering from Seoul National University. His expertise includes materials in nuclear engineering and engineering of nuclear systems.

Speaker biographies – Keynote session 2



Fuming JIANG is currently with International Atomic Energy Agency (IAEA) as the head of operational safety, overseeing the programmes of leadership and management for safety, safety culture, operational safety review, performance improvement and operating experience feedback, and long-term operation of nuclear power plants and relevant nuclear installations in the Member States of the IAEA.

Before joining the IAEA in 2013, Fuming had held various senior positions in nuclear power plants, corporate organisations and international organisations. Fuming was the director of the fleet operation for China National Nuclear Corporation (CNNC), providing corporate governance and oversight of the operational fleet with seven nuclear power reactors at that time. Prior to that, he worked for a nuclear power plant in various areas with increased responsibilities, such as training, commissioning, outage and plant management.

Fuming is married and has a son.



Oliver MARTIN is the Project Leader of Long-Term Operation of Light Water Reactors at the European Commission – Joint Research Centre (EC-JRC).

Oliver Martin holds a MSc and a PhD in mechanical engineering and a MSc in nuclear science and technology. He joined the EC-JRC in Petten, the Netherlands in 2006 and briefly worked on transport, storage and disposal of spent nuclear fuel before moving to his present work field, long-term operation (LTO) of LWRs in 2008.

Since 2014 he has been project leader for LTO and also became team leader materials science in 2022. His specific work fields are ageing degradation and integrity and lifetime assessment of LWR components, nuclear codes and standards development, supply chain and obsolescence of safety classified structures, systems and components, in-service inspection of LWRs. Since 2021 he is also increasingly looking into SMRs, both water and non-water-cooled designs, and advanced manufacturing techniques for reactor components. He is significantly involved in the Sustainable Nuclear Energy Technology Platform (SNETP), in particular its first pillar NUGENIA on Gen II and III reactors, and he serves on the SNETP Technical Secretariat.

He has also served in the IAEA Technical Working Group / Network on Plant Life Management (PLiM) and the programme committee of the IAEA PLiM conferences.

Speaker biographies – Session 3



Jeremy HUBERT chairs the Working Group on Supply Chain at the Nuclear Energy Agency. He facilitates the exchange of vendor inspection reports and best practices among regulators. He actively engages with stakeholders to enhance collaboration, improve the quality of nuclear components and bring attention to emerging risks.

Mr Hubert also serves as Inspector for the Nuclear Safety Authority (ASN). In this role, he oversees the nuclear supply chain and has conducted multinational vendor inspections. Mr Hubert joined the French ASN as a nuclear safety inspector in 2016 and brings with him over 12 years of experience in the nuclear industry. In his initial role, he worked as a nuclear engineer.



Nawal PRINJA holds the position of Technology Director (Clean Energy) at Jacobs in the United Kingdom.

Professor Nawal Prinja has 43 years of academic and industrial experience in the nuclear civil and defence sectors. He has held a position of Honorary Professor at four British universities (Aberdeen, Brunel, Bangor and Bolton). He is an expert on codes and standards. He chaired the CORDEL Working Group of WNA and chairs the Mechanical Codes and Standards Task Force. He has been working on Harmonisation of Nuclear Codes for over 10 years.

He has been on IAEA missions to China, Poland, South Africa, Spain and the UAE. He was appointed as an advisor to the UK Government to help formulate their long-term R&D strategy for nuclear industry and was a member of the Fusion Advisory Board of UKRI. He chaired a Technology Focus Group on Artificial Intelligence in the Science and Technology Advisory Group of Ministry of Defence, participates in a number of international committees and represents the UK at the Senior Industry Advisory Panel of the Generation IV International Forum for next generation of nuclear reactors. He is a founding member of the "Al for Nuclear" lead team set up by the Nuclear Institute to help promote Al applications in the nuclear sector.



Marc TANNENBAUM is a senior technical executive at EPRI, where he manages the procurement technical assistance programme which includes the Procurement and Related Topics Symposium (PEARTS) well as technical procurement-related projects addressing issues such as nuclear new build procurement requirements, reverse engineering, obsolescence, quality of procured items, and commercial-grade item dedication.

Marc is a member of the ASME NQA-1 Standard Committee, Subcommittee on Engineering and Procurement Processes and Chair of the Subcommittee on International Activities. Marc is also a member of the Nuclear Supply Chain Strategic Leadership (NSCSL) Executive Committee, and Nuclear Utility Obsolescence Group Advisory Committee.



Young-Ho SHIN has been working in the nuclear energy field at KHNP(Korea) for 23 years. With over 10 years of quality assurance experience, he is currently charging of CFSI Verification in the Nuclear Quality Verification Section in KHNP as a senior manager. Qualified as a lead auditor, high-level quality inspector in KHNP, he has been participating in NUPIC audit.



Marilou LEBEAULT is a Quality Manager for Accredited Inspection Body at Framatome in France. She has 16 years of experience in the civil nuclear sector: she occupied various positions, from in-field inspection to quality management and supply chain interface for the fight against CFSI.

After seven years' experience as a suppliers inspector within Electricité de France (EDF), she was appointed as Quality Director for the Framatome Le Creusot Plant in 2015. She built and managed the large-scale quality improvement plan, allowing the restart of manufacturing in the best conditions for quality and nuclear safety by taking lessons learnt from past malfunctions and managing the Task Force investigations on delivered components.

During her career, she has worked on several workshops with AFCEN (the organisation that develops and provides codes and reference rules for design, construction and in-service inspection) and GIFEN (a group of French industrial partners for nuclear energy), related to quality topics.

She was also in charge of regulatory matters for French projects in interface with the French regulator, ASN. She is the leader for ISO17020 accreditation renewal and above all, she leads the actions of fight against CFSI within the supply chain. Since 2021, she has developed and organised detection methods that make it possible to find about 10 irregularities every year.

These activities give her the opportunity to interface regularly with actors of supply chains from all over the world and especially in Asia and Europe, in various fields: electronics, instrumentation and control, fuel, mechanical equipment, material manufacturers.

She is also working on preventive methods to secure successful delivery.

Speaker biographies – Session 4



Stuart ALLEN is a Nuclear Safety Inspector working for the UK's Office for Nuclear Regulation (ONR). He is the regulatory lead for the Supply Chain and Quality specialisms.

He is a chartered engineer who has worked in the UK nuclear industry for over 35 years, focusing much of his recent career on establishing arrangements to enhance supply chain performance enabling safe and reliable nuclear operations.

He was Chairperson of the Committee of Nuclear Regulatory Activities' Working Group on Supply Chain Regulation from 2015-2023.



Marc McBride is a Principal Inspector for Nuclear Safety at the Office for Nuclear Regulation in the United Kingdom. He is also a bureau member of the NEA Working Group on Leadership and Safety Culture.

Marc heads ONR's team of inspectors specialising in leadership and management for safety, including matters relating to organisational culture. Marc has 35 years of experience in both regulatory and industry roles across different major hazards sectors in the UK and worldwide.



Chris QUINN has spent 35 years in the construction industry specialising in high-profile large-scale investment megaprojects.

He is employed by EDF (UK) and joined the Executive Directorate at Hinkley Point C in 2019 as the Supply Chain Director. His role encompasses leading a diverse team of 250 providing professional services in procurement, contract and commercial management, data analytics and performance insight, dispute resolution and supplier relationships.

Chris also strategically supports Sizewell C, a replicated plant in Suffolk, England, to ensure lessons learnt and benefits are captured. Strategic collaboration is also in place with his colleagues in EDF (SA) to support the next tranche of industrial nuclear plants in France and wider Europe.



Teemu KELAVIRTA holds the position of Technical Design and Engineering Manager at Fortum in Finland.

Born in Finland, he holds an MSc degree in Mechanical Engineering and has 13 years of nuclear experience.

He earlier worked at different companies including Andritz Oy and Stora Enso GmbH.



Takashi KURISAKI holds the position of Project Quality Assurance Manager for the ITER Project at MHI in Japan.

Some of his experiences include:

- Engineering manager of "Quality Assurance Department" for management and improvement of quality assurance activities for French Nuclear projects, 2019-2021
- Engineering manager of Nuclear Project Management Department for overseas projects, 2011-2019
- Engineering manager of New Energy System Department, 2010-2011

Speaker biography – Closing session



Véronique ROUYER supports the Director-General of the NEA in enhancing the technical excellence of the Agency's work and ensuring high standards of safety in the use of nuclear energy by supporting the development of effective and efficient regulation and oversight of nuclear installations, and by helping to maintain and advance the scientific and technological knowledge base.

Prior to joining the NEA, Ms Véronique Rouyer was the Safety Research Director in the French Institut de radioprotection et de Sûreté Nucléaire (IRSN), the French Technical Support Organisation to public authorities dealing with radiation protection and nuclear safety. She managed nuclear safety research activities and programmes including numerous co-operative activities distributed among 16 laboratories including experimental facilities and simulation codes development platforms.

In addition, she gained extensive experience in the development and co-ordination of scientific programmes plans as Deputy Director for the scientific projects, strategy, development and partnerships division, a role she held between 2009 to 2016. Previously, she managed and co-ordinated IRSN criticality safety activities, assuming positions of increasing responsibilities over 15 years, including in areas such as nuclear fuel cycle facilities and safety assessment and evaluation of the transport of radioactive materials. She was also very involved in academic and professional training activities. From 1985 to 1994, she conducted lectures and training workshops and was in charge of the INSTN Nuclear Engineering Master Degree (Institut National des Sciences et Techniques Nucléaires – the benchmark institute for education and training in nuclear science and technology).

Ms Véronique Rouyer holds a Graduate Chemical Engineering Master's Degree from the Polytechnic Institute of Toulouse and a Post Graduate Master's Degree in Nuclear Engineering from the INSTN.

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