

<p>Frans Boydon</p> 	<p>Ex-Head of ONR's Licensing Unit and Professional Lead on Decommissioning and Radioactive Waste Management: Frans has over 40 years experience in the nuclear industry with an especially extensive safety and regulatory experience nationally and internationally across a range of technical disciplines. Latterly he was Superintending Nuclear Inspector during a 25 year career at the Nuclear Installations Inspectorate (NII, now ONR) and managed ONR's licensing unit dealing with granting of licenses and changes to them, and was also responsible for the regulation of the UK's decommissioning and radioactive waste management strategy. His experience whilst with ONR covered every single UK nuclear facility from fuel manufacture, different reactor types, fuel reprocessing, waste management and stores through to disposal facilities.</p> <p>Since retiring from ONR Frans has worked as an independent consultant in a wide variety of nuclear technical areas. In particular Frans has provided advice to NDA on licensability of potential reactor designs to burn plutonium, and also to immobilize Pu, advised on safety cases for fuel transport flasks, is an advisor to Horizon Nuclear Power on organizational capability and their licensing capability. In addition, he has done extensive work for the IAEA on decommissioning and radioactive waste management issues as well as advising developing countries upon how to write appropriate, proportionate nuclear laws and to establish regulatory bodies. He also works for the Finnish regulator, STUK, providing advice on decommissioning and radioactive waste management.</p>
<p>David Bradbury</p> 	<p>David Bradbury is an expert with over 40 years in the nuclear industry and offers specialist advice in the field of nuclear power and fuel cycle technology. He was Head of Fuel Cycle and Radioactive Waste Research team whilst at the CEBG in the 1980's. As such he was the technical representative for Fuel Cycle matters within the CEBG at the time. Since then he has maintained contact with the technology of fuel reprocessing and its relationship with different reactor designs including Fuel Cycle issues in respect of SMRs, and has been involved in some strategic projects in this field.</p> <p>He has written over fifty papers in the technical literature on radwaste processing, and is an inventor or co-inventor of 16 patents. The LOMI and EPRI DFD process patents (on which he is named inventor or co-inventor) have been used for industrial projects with an overall value in excess of £100m. David was Chairman of the NIA's Decommissioning Working Group 2003 – 2012.</p>
<p>George Elder</p> 	<p>George Elder has over 37 years of experience in the nuclear industry. Most recently as a Director of ProNuDec Ltd he was the named technical expert on an EBRD contract (€10M) for the decontamination of two VVERs at Bohunice in Slovakia. Previously he was the Technical Director for Bradtec Ltd for 22 years; a company which developed technology for the nuclear industry, specialising in waste management, decommissioning and decontamination of radioactive materials. He was responsible for the technical direction of the company business and successful completion of the R&D programme for clients such as the Electric Power Research Institute (EPRI) in the USA and the, US DOE. In the UK studies were undertaken for the NDA, Magnox, EDF and UKAEA. A number of patented processes were developed.</p> <p>Previously George's extensive experience includes research in the Irradiated Fuel Section of the CEBG Berkeley Laboratories, commissioning of the AGR NNP at Torness, Managing a UK radiochemical centre of expertise during the Chernobyl incident, author on the Pre Decommissioning Safety Report (PDSR) for Berkeley and Bradwell NPP and developing the ILW solid waste specifications for the CEBG.</p> <p><i>George joined TÜV UK Ltd.'s Nuclear Division in October 2018 as Technical Director – Nuclear Consulting</i></p>

**Mamdouh
El-Shanawany**



Internationally recognized Nuclear Safety Design, Assessment and Business Development Leader. Over 40 years' experience in providing strategy, management and leadership of multi-ethnic teams, design, research & development, analysis and critical safety assessment, applications of statutory regulatory requirements and policy development for the regulators and nuclear industry both within the UK, Canada and internationally. Excellent communicator and mentor - able to understand issues in a multi-dimensional environment, providing and delivering solution that support wide spectrum of stakeholders.

Mamdouh's extensive experience also includes:

- Visiting Professor (Nuclear Safety) at Imperial College of Science & Technology, Centre for Nuclear Engineering, London University
- Member of the International Atomic Energy Authority (IAEA) team awarded the 2005 "Nobel Peace Prize"
- Nuclear Global Director, Lloyd's Register. Lead and managed Lloyd's Register's international nuclear business, identifying and advising on acquisitions
- Senior member of the Office of the Deputy Director General, Nuclear Safety and Security, International Atomic Energy Agency (IAEA), Vienna
- Head of Safety Assessment Section, IAEA, Department of Nuclear Safety and Security, Vienna. Main duties: to strengthen Member States' capabilities and infrastructure (Regulatory Body, Designers and Operators)
- Developed and lead IAEA's generic reactor safety review assessment of new reactor designs against IAEA's Safety Standards
- Member of UK Government Nuclear Innovation Research Advisory Board
- Senior member of UK Regulatory Authority, Nuclear Installations Inspectorate (NII).

**Norman
Harrison**



Ex-CEO UKAEA & Station Director Sizewell B, Heysham 1 & Divisional Director Dounreay - Operating as a senior executive with over thirty-five years experience in the nuclear and power sector, in both the private and public sector. Extensive experience of managing a broad spectrum of stakeholders including Governmental and regulatory bodies in both the UK and internationally. Norman is a senior figure in the UK power generation and nuclear sector, he has significant international experience.

He has a portfolio of appointments including stewardship of an investment fund covering decommissioning and waste management costs for nuclear plant which are presently operational, and senior advisory roles with industry players. He is a NED with the UK Fusion Programme and deputy chair of the Advisory Council to Radioactive Waste Management Ltd who is tasked with building the deep geological repository for radioactive waste.

Previously Norman was the Director of Strategic Development with Babcock International Group. Before joining Babcock International he held the high profile role as Chief Executive Officer of the UK Atomic Energy Authority. Following Government endorsement of a new business strategy for UKAEA Norman successfully led UKAEA's transformation into a vibrant new British company winning work in the public and private sectors. Norman led the sale of UKAEA for which Babcock International was the successful purchaser.

Norman's career before joining UKAEA was in the nuclear power generation sector. He was Station Director at Heysham 1 in Lancashire before being appointed Director of Sizewell B, British Energy's flagship PWR in Suffolk, the post he held prior to being appointed at Dounreay. Norman is the Deputy Chairman and a governor of the board of the Manchester Metropolitan University.

David Hebditch



David Hebditch is a specialist Nuclear Engineering and Chemistry expert. Most recently he has worked in the Fuel Group of the Nuclear Technology Branch of EDF-Energy for the Sizewell B Dry Fuel Store (SZB DFS) Project. Before then he worked for one year with the DFS Project as a Babcock Nuclear employee. For SZB DFS, he has performed technical assessments and authored EDF Energy reports including:

- Chemical assurance from cradle to grave for EDF Energy use of Holtec International casks (MPC) for 100 year dry storage of Sizewell B spent fuel assemblies
- Chemical impurity limits for SZB SNF cask helium environment at weld sealing
- Design of chemical analysis system to support SZB MPC-SFA processing.

Before this for UKAEA and Babcock (2009-2012) he carried out tritium design safety studies for the ITER fusion project, fuel cycle strategy studies for Polish Government, and led a peer review study of a RepU fuel fabrication project for EDF.

From 1996 to 2009, David participated in studies on molten salts with Argonne National Laboratory (ANL, USA), Japan Nuclear Cycle (JNC Tokai Works), BNFL Sellafield and Idaho National Laboratory (INL). He was the technical lead for the Magnox Electric study on molten salt pyrochemical treatment of Magnox fuel performed in USA with ANL and BWXT, and a two year International Fellowship with JNC (now JAEA) on molten salt pyroprocessing of fast reactor fuel. He also performed comparison of aqueous and pyroprocessing for the conceptual design of the advanced fuel cycle facility (AFCF) and consolidated fuel treatment center (CFTC) for LWR spent fuel separations at Idaho National Laboratory for the Global Nuclear Energy Partnership (GNEP) led by the Department of Energy (U.S. DOE).

He has performed spent fuel engineering design, development, assessment, technology and strategy work in the international nuclear industry for several decades with a high level of technical effectiveness. He has performed development work for Magnox, AGR, PWR and liquid metal reactor systems.

Mark Higson



Ex-CEO OND DECC - led the Office of Nuclear Development, DECC and the development of the government's large scale reactor programme from 2006 to the end of 2013. Mark ran the government's nuclear agenda from a standing start, legislating to create the new office for nuclear regulation, reforming planning legislation, identifying suitable new nuclear sites, and encouraging nuclear developers to acquire sites and invest in plans to deploy new nuclear power stations. In short his role was to make it possible for new nuclear to happen again in the United Kingdom, culminating in the agreement to proceed with Hinkley. He also therefore has direct experience of operating in the areas, which are likely to feature in any competition to assess the attractiveness and best value to the UK of contending SMR designs.

Mark is currently an energy consultant advising clients on how best to interact with government. He is also an associate director of Grant Thornton, currently advising the Nuclear Decommissioning Authority.

Prior to picking up the nuclear agenda, Mark worked with investment banker Richard Gillingwater to create the Shareholder Executive, a centre of excellence for professional management of commercial government owned companies.

Mark has had a 30-year career in the civil service and has worked on many high profile projects including electricity privatisation and regulation. Mark has a degree in chemistry from Cambridge University.

Philip Isgar



During the last 40 years Philip has worked extensively within the Nuclear and Infrastructure sectors holding senior management roles in both. He has proven success in 3 Regulatory environments: Nuclear, Rail and Water - delivering a wide experience of developing, leading and managing, multi-discipline high profile Capital Investment Programmes and organisations within both public and private sectors, that seek strategic level policy making, engineering excellence, complementary interpersonal, influencing and Leadership skills. Philip holds Institution Fellowships as a civil and structural engineer, an Honorary Member of the Major Projects Association, an Honorary Fellowship and Life-Time Member with the Association for Project Management, and an Honorary Doctorate of Engineering. He sits on the NW Nuclear Forum Steering Group, Constructing Excellence Nuclear Theme Group, and Constructing Excellence Manchester Executive. He has also serves on a number of Institutional Boards: Past Chair – ICE Manchester, Chair – Nuclear Institute Digital-SIG, member of ICE Northern Powerhouse Steering Group, and has represented those Institutions with the Construction Industry Council (CIC). He is Chair of CIC North West and sits on the ‘After Grenfell Working Groups’ and ‘Building a Safer Future –Working Group’.

Philip is currently working in support of BEIS on Digitalisation including Building Information Modelling for the Nuclear Industry. Also as part of the Constructing Excellence organisation to develop a ‘Factory Thinking’ Strategy that aligns with the Industrial Strategy Nuclear Sector Deal (June 2018) and the Industrial Strategy Construction Sector Deal (July 2018). Philip’s strength is providing leadership and connectivity across a number of sector platforms through collaborative working relationships at Board level and with Government.

Sabine Joubaire



Sabine has over 25 years experience in the nuclear industry as a project manager and process design engineer including: process calculations, equipment design and reporting, functional analysis of working processes, commissioning plans and validation testing, critical analysis of technical data, assessment of technical-operation and economic evaluation of processes, and feasibility studies.

She is currently a Director at ProNu-Dec Ltd.. Before this, Sabine started her career in the automobile industry as a Quality and R&D Laboratory Manager in France and brings from this a wide range of expertise gained in chemical process engineering and management. Experience in different areas and aspects of the French nuclear industry, CEA, Areva, EDF, Socatri, SGN, FBFC and Comhurex have given Sabine a broad knowledge and understanding of the industry. Prior to ProNu-Dec she was a Project Manager at EDF Chooz ‘A’ managing the decontamination and removal of the primary coolant loop (€12M).

Sandy McWhirter



Sandy has had a distinguished career of over 40 years in the nuclear industry in the UK and abroad. He has experience in most aspects of the UK’s nuclear industry including new build, decommissioning and R&D and occupied several senior management roles in the UK nuclear power industry. He was a member of Council of the I.Nuc.E. and executive chair of the Industrial and Power Association. As Head of Engineering of the United Kingdom Atomic Energy Authority he was responsible for the re-establishment of an engineering function at UKAEA sites following the Safety & Environmental Audits of 1997.

He has carried out many assignments for the International Atomic Energy Agency (IAEA) in the fields of socio economics, nuclear contract management and the management of unexpected events in decommissioning. He was the UK government representative on the IAEA’s Waste Technical Committee (WATEC) and was an invited expert advising the EU and Ukraine Government on the disposition of large quantities of Uranium milling wastes at Dneprodzerzhinsk. He was recently engaged by IAEA’s Office of Internal Oversight Services to review the Agency’s performance in support of newcomer nations considering nuclear power.

He worked with the Lightbridge Corporation (Formerly Thorium Power inc.) who developed the early plans for Barakah Nuclear Plant in the UAE and in 2011, advised the Kuwait National Nuclear Energy Committee (KNEEC) on the implications of the Fukushima Daiichi accident as its details emerged.

Sandy is co-author of the book, “Advances and Innovations in Nuclear Decommissioning”. He also worked on an assignment in the British Embassy in Budapest preparing information to support potential UK involvement in the PAKS II Nuclear Power Plant project. He has been providing strategic licensing advice via a UK consulting company to Japanese and Chinese organisations investing in new nuclear generation in the UK.

Andrew Mirams



With nearly 40 years experience in the nuclear power utilities sector Andrew’s most recent role was as a Project Programme Manager and Construction Manager for Magnox Oldbury Power Station. He was accountable for the safe and efficient delivery at Oldbury Power Station of major programmes of work within the Project Delivery Organisation. This included the management of a Project Department of multi-discipline engineers covering all aspects of: day to day De-fuelling, Nuclear Fuel Route, Asset Management, Decommissioning Strategy Development, Decommissioning Preparations and Radioactive Waste Management activities. As the Sites Construction Manager Andrew undertook the role of CDM Principal Contractor where Magnox undertook that responsibility at Oldbury Site. With respect to decommissioning strategy and planning. Andrew acted as the Key Site interface with Magnox Corporate Strategic Programmes and the associated Business Plan preparations.

Andrew also performed a key role within the Emergency Arrangements at Oldbury Power station being appointed as an Assistant Emergency Controller.

John Priestland



John Priestland is a Fellow of both the Institution of Civil Engineers and the Institute of Physics, and in the latter capacity he was the founder and first Chairman of the IOP Nuclear Industry Group. He has worked extensively at Sellafield, AWE and at Barnwood for British Energy, where he advised the board on the technical risks facing the company at the time of the relisting. He was also the lead adviser to Government on the Strategic Siting Assessment for new nuclear power stations, which underpinned the National Policy Statement for new nuclear. More broadly, he was an Executive Main Board Director at Hyder Consulting, Global Strategy Director at WSP and, most recently, Head of Digital Transformation at AECOM.

He has a physics degree from Keble College, Oxford and an MBA from London Business School.

<p>Terry Selby</p> 	<p>Terry Selby had a long and distinguished public sector career, culminating in setting up the Nuclear Decommissioning Authority (NDA) and becoming its Strategy Director. He has a strong policy and regulatory background and dealing with people in a sympathetic, understanding manner has always been at the centre of whatever he has done. His strategic, central role in the Liabilities Management Unit and in the NDA involved frequent engagement with a wide variety of local, national and international stakeholders. He was a consultant to URS (now AECOM) on nuclear new build. More recently, he was Head of the Funded Decommissioning Programme at NuGen. Terry is well known and respected throughout the nuclear sector and has a very wide network of contacts.</p>
<p>Brian Slaney</p> 	<p>Brian has over 40 years experience in the engineering sector, including Nuclear, Power, Chemicals, Oil & Gas and Construction and has worked both in the UK and internationally. Experienced in the following roles: Project Management Consultant, Senior Project Manager, Construction Manager, CDM–Coordinator, Planning Supervisor, Senior Engineer, Maintenance Manager, Operations Manager and more recently as Business Development Manager/Bid Manager for AMEC and then Costain. He personally led the bid for the Sellafield Evaporator-D project (£650m).</p> <p>Successes also include:</p> <ul style="list-style-type: none"> - securing a £288m Magnox CIESF Framework - securing a FED Framework for Magnox £70m - securing SAWBR Contract Hunterston £16m <p>Other project and professional experience includes: managed Laporte's largest project ever in UK. A £21m clays process plant and associated infrastructure throughout project lifecycle including stakeholder liaison, design, construction and commissioning. led the roll out of the training and introduction of the CDM Regulations companywide in Laporte.</p>
<p>Peter Storey</p> 	<p>Nationally and internationally recognised for expertise in Nuclear Safety, Regulation and Research. As Director of Nuclear Safety Research in ONR he was responsible for the national research programme on nuclear safety and led for the UK on the Fission Safety Programme where he chaired the EC's advisory committee for 7 years. He was a member of the NDA Research Board and was a senior expert to the OECD and IAEA. His varied career provided him with the role to provide national leadership on nuclear skills shortages and to lead on ONR's improvement programme on stakeholder engagement and communication.</p> <p>After 35 years in Government service he was appointed Professor of Nuclear Policy and Regulation first at The University of Manchester and then at UCLan. In academia, he has led on postgraduate nuclear course development and undertaken research on nuclear research policy, security, small modular reactors and innovative nuclear reactors. He currently lectures on nuclear safety at UCLan and Chester University.</p> <p>Recently Peter led the STE package for the BEIS programme on Nuclear Security.</p>

**Tony
Wickham**



Tony Wickham celebrated 50 years either directly or indirectly in the service of the UK nuclear industry in September 2018. A Fellow of The Royal Society of Chemistry he joined CEGB in 1968 at the Berkeley Laboratories working on the irradiation behaviour of reactor coolants and graphite moderators. He became Head of the Graphite Monitoring Group responsible for gathering information on the property changes in irradiated graphite and applying the data to codes used in operational safety cases for Magnox and AGR reactors.

Tony has fulfilled many assignments for IAEA in all aspects of graphite-moderator behaviour including founding the International Nuclear Graphite Knowledge Base, and is currently the Project Coordinator of a large international group under the International Predisposal Network for investigating processing approaches for disposal of irradiated graphite, with a personal specialist interest in the management of Wigner energy. He has been a long-term advisor to EdF-Energy on graphite core degradation and to UK/US government departments on nuclear security issues. Enjoying close associations with nuclear research and development institutions world-wide, he is a Visiting Professor at The University of Manchester (Nuclear Graphite Research Group) and a Visiting Lecturer at The University of Brighton. Tony shared the Royal Society Esso Energy Award in 1997 for work in support of Magnox-reactor operations.