

**INSTITUTION OF GAS ENGINEERS AND MANAGERS
ENGINEERING UPDATE COURSE 2008
10 AND 11 JUNE 2008 IMAGO LOUGHBOROUGH**

Profile of Speakers

Tuesday 5 June 2007

***Robert Murray, President, IGEM and Group Engineering Director for Gas,
Metering and Electricity, Inexus Group***

Eur Ing Robert J Murray BEng(Hons) MBA, CEng, FInstLM, FIGEM, MIAM, MIED is the Engineering Director at Independent Pipelines Limited (IPL), part of the INEXUS GROUP (Holdings) Limited. IPL is the largest Independent Gas Transporter in the UK. Having worked for his previous employers in the gas industry for thirty years in a number of senior positions, Bob is very excited about his role at IPL.

“Joining the Inexus Group was an opportunity not to be missed. Having recently been acquired by Challenger Financial Services Infrastructure Fund, one of Australia’s leading Infrastructure Funds, INEXUS is ready to further enhance its market position as a leading Independent Gas Transporter and Utility Infrastructure Provider”.

Bob has been impressed with how INEXUS develop their people at all levels of the organisation through IGEM membership. Originally from South Wales, Bob has returned to his gas industry roots by working for INEXUS at their Cardiff head office.

***James Kwan
Executive Director & Chief Operating Officer
The Hong Kong and China Gas Company Limited***

James Kwan gained an honors degree in Mechanical Engineering at the University of Hong Kong in 1973; he obtained a Master of Business Administration from the Chinese University of Hong Kong in 1982. He joined the Engineering Division of The Hong Kong & China Gas Company Limited in 1975 and was promoted to General Manager – Engineering in October 1989. He was appointed to the Board in January 1997, became Director & General Manager – Marketing & Customer Service in May 1997, and took up his present position in January 2003. He is Deputy President of Towngas International Company Limited, Executive Director of Towngas China Company Limited, Executive Vice President of Hong Kong & China Gas Investment Limited, and Director of the Group’s joint venture companies in China.

James is well known for his contributions to the engineering profession. He is currently a member of the Gas Safety Advisory Committee and Transport Advisory Committee of the Hong Kong Special Administrative Region. He was the President of the Institution of Gas Engineers and Managers, UK in 2000/01 and the President of the Hong Kong Institution of Engineers in 2004/05. Mr Kwan is a Member of the Eleventh Nanjing Committee of the Chinese People’s Political Consultative Conference.

Jon Butterworth, Director Operations, National Grid

John has accountability for the safe and secure delivery of natural gas in the UK to 11.2M customers and the globalisation and consistent implementation of National Grid plc strategy.

His external positions include Board Trustee of Council of Registered Gas Installers (CORGI), Board Member of Pipeline Industries Guild (PIG), Chairman of E Tapp Group Ltd, Chairman of Manchester Shopfittings, Chairman of John Grey Ltd and he is the National Grid Ambassador for Special Olympics.

Phil Clarke, Head of Investment, Gas Distribution Operations, National Grid

Phil is currently responsible for running the capitals gas emergency service, focusing on safe guarding life and property and responding to over 140,000 gas escapes within the London Area. Additionally he covers the provision of metering services, replacement of complex gas mains, maintaining the gas distribution above ground assets and connecting new customers.

He joined National Grid in June 82 and has held the following posts during his career with that organisation: Head of Network (East of England asset management responsibility), Area Manager (DBM Maintenance operations - management of Transmission, Distribution, Terminals, and Compressors) and Operations Manager - East Anglia. He was a Student Engineer with GKN.

Mark Williams, Gas Distribution Operations - Process Manager, National Grid

Mark began his career with North West Gas as a Gas Distribution Apprentice. He gained a BSC (Honours) Degree at University of Salford, moved to Preston as Assistant Engineer (Pipelines/AGIs) and in 1992 as a Chartered Engineer he became Section Engineer (Transmission) at Warrington. He held posts in Bolton (Network Operations Manager (Maintenance) and Network Manager (Connections) before being appointed to his current post in 2000.

Paul Clarke, Head of Maintenance, Gas Distribution Operations, National Grid

Paul is responsible for safety, supply security and operational integrity of all gas transportation assets of National Grid Gas Distribution in the UK. Prior to his current role his career has progressed through the roles of Area Operations Manager, Engineering Planning Manager, Head of Network, Asset Manager, Network Development Manager and various managerial posts.

Christopher McDonnell, Managing Director, 3M E Wood Ltd

Christopher became Managing Director of E Wood Limited in 1984. The company manufactures a range of high performance industrial coatings for the oil, gas, water and related industries. Prior to this from 1976 to 1984 he was Managing Director, Belzona Molecular Ltd involved in the manufacture of specialist compositions for the repair and refurbishment of machinery and equipment operating in aggressive industrial environments.

In 1993 the company introduced new technology into the water industry involving the in-situ lining of existing water pipes. Over the last 15 years this technology has been refined and improved with remarkable success. In 2003 E Wood Limited commenced a collaboration programme with NGT to develop new in-situ lining technology for gas pipes.

The company won the Queen's Award for Innovation in 2006.

Nick Murray, Business Improvement Manager, Advantica

Nick has over 30 years Civil Engineering experience in water and gas utilities, for the past 15 years Nick has been helping organisations improve their performance. This has involved developing and implementing ISO 9001 certificated QMS and a range of improvement programmes and models, including EFQM.

Nick is currently responsible for developing Advantica's Change Management capability. He delivers internal change and provides change management services to a broad range of external clients.

Mike O'Neill, Director, United Utilities Operations

Dr Michael O'Neill has held his current post for the last year having previously been Commercial Director for two years. After a period of self-employment in 2003-4 he was appointed as a Director of Veolia Water Systems - the contracting arm of Veolia Water in UK. Veolia Water is a Division of the French Group, Veolia Environment and is the largest water treatment and water services group in the world.

After a spell as Research Fellow at Leeds University in 1989 he moved to Senior Engineer, Babbie Shaw and Morton followed by a role as Process Manager, North West Water Group plc and then Managing Director, VA Tech WABAG UK Limited before becoming - in 2000 - Managing Director, Salcon Invent Limited.

Mark Barnes, Head of Customer Strategy, United Utilities

Mark is a highly motivated, business focused Customer Services Director with extensive experience in both utilities and retail sectors. He has a demonstrable track record in leading very large strategic change programmes and proven leadership and commercial management competencies. As an active Management Board member he contributes to the overall success of the business across all disciplines and acts as a Non Executive Director in central government promoting community projects and local business development.

His roles before joining United Utilities include Head of IT and Programmes and Competition (1998) Programme Manager at Norweb, Area Manager, Norweb, Regional Sales and Service Manager, Sears plc, Project Manager, Bass plc and various roles for British Gas.

James Lyall Program Manager, Accenture

A personal profile will be shown here as soon as this is received.

Lay Yen Lau, Senior Process Engineer, 2008 Gas Industry Young Persons' Achievement Award Winner and Rob Judd, Principal Consultant, Advantica

Lay Yen Lau gained three years industrial experience in various engineering roles in her home country, Malaysia, prior to coming to the UK to complete a Masters degree in Chemical Engineering at Imperial College. She joined Advantica in 2005 and has worked on a range of technical and commercial projects covering CNG, LNG, gas adsorption and gas processing technologies.

Lay Yen has been developing ANG for diurnal storage and vehicular applications since 2005, and in 2007 successfully converted a motor scooter to run on ANG fuel. Her ANG expertise includes supply and demand analysis, network simulation, carbon selection, process design and system control.

Steve Rowe, Technical Policy Adviser, Ofgem

A personal profile will be shown here as soon as this is received.

Eileen Combs, Planning Engineer, NW & WM Networks National Grid Winner 2008 IGEM Young Persons' Paper Competition

A personal profile will be shown here as soon as this is received.

Oliver Wood, Placement Process, National Grid Grain LNG

As an extension to the university degree course Oliver was studying at the time, he undertook work with RSK ENSR Shear in the Project Services division of the company. The job was mainly based around health and safety in the rail industry, and saw the completing of risk assessments on major railway lines and stations on the west coast rail network for existing and modified lines. Towards the end of this role, he was placed at National Grid Grain LNG as a Junior Engineer working on the client side of an LNG terminal expansion project in Kent. The work was solely based around the development of ITT documentation for a nitrogen generation plant for gas quality purposes on the phase 2 expansion of the terminal.

After completing three years on an undergraduate degree in Chemical Engineering at the University of Bath, Oliver started work with the projects group at National Grid Grain LNG. The terminal was undergoing a vast expansion being overseen by the projects group which offered the opportunity of design engineering and commissioning experience. The role saw him working on numerous projects covering front end project design, investigations into operational plant upset conditions, development of commissioning philosophies, and process simulations of the expanded terminal for customer feedback. Currently working in the project development team he is reviewing several proposals for optimisation of boil off gas on the terminal through conceptual design and feasibility with the specific aim of maximising shipper profits.

Andrew McKelvey, Policy & Engineering Manager, National Grid

Andrew joined the former Eastern Region of British Gas within the Distribution department and after two years was promoted to the role of Planning Engineer within the Southern Region at Southampton. He held a variety of posts during the 'regional' days including District Engineer and assistant Area Engineer. He was appointed asset manager for the North London LDZ in 1998 and subsequently head of operations in 2001. Following the sale of 4 networks by national grid he took up the role of Engineering manager within the newly formed Construction Directorate, where he is project manager for the 4 Gas Alliances. In 2006 he also assumed responsibility for Engineering Policy for national grid gas distribution.

David Mercer, Senior Project Manager, National Grid

David Mercer is a Chartered Engineer, a Fellow of the Institution of Engineering and Technology and is employed as a Senior Project Manager by National Grid. Since graduating in 1983 David has spent his entire career working in the Power and Gas Industries. First appointments were at Agecroft and Heysham 1 Power Stations prior to moving to National Grid in 1990 immediately following the privatisation of the industry. The 1990's were a particularly challenging period with a series of new gas fired power stations connecting to the grid. David was the Senior Project Manager for the construction of the 75km 400kV Overhead Line route through the Vale of York, which is the largest power line that has been constructed in the UK post privatisation. Following National Grid's merger with Transco, David took responsibility for a number of major gas transmission projects.

In 2005 David was appointed Senior Project Manager for the construction of the 316km natural gas pipeline to connect two major new Liquefied Natural Gas (LNG) importation facilities at Milford Haven. The two terminals will provide around 20% of the UK's natural gas requirements and the extensions and modifications to the National Transmission System are the most extensive undertaken since its original construction and costing £1bn.

Jessica Richardson, Project Engineer, UK Construction, National Grid

Having started her career as a Performance Analyst in National Grid's Construction department, Jessica worked with the 4 newly formed gas Alliances and the 6 Term contractors to reduce underground plant damage, and decrease the volume of waste sent to landfill. In 2006 she joined the Milford Haven pipeline project as a Project Engineer within the Environment team. This 316km, 48" gas transmission pipeline was successfully commissioned earlier this year, connecting the new LNG terminals on the coast to the existing gas network in Gloucestershire. Pursuing her interest in environmental protection Jessica continues to work in gas transmission construction, as a Project Engineer in Quality Assurance.

Richard Sore, Project Engineer, National Grid

Richard spent a year in Industry placement with British Energy, 2000-2001 before receiving sponsorship through British Energy's undergraduate scheme for the period 2001-2004 after which he completed a Masters in Mechanical Engineering at the University of Exeter.

Following a short placement with Alstom Power after graduation he moved to National Grid, during which he worked for six months within the West Midlands Gas Alliance, six months on the Milford Haven Project and had six months within the South West Electricity Alliance.

He is now entering his first post as a Project Engineer within the South West Alliance.

Steve Wing, Head of Gas and Pipelines Unit, Health and Safety Executive

Steve manages HSE's Gas and Pipelines Unit with enforcement responsibility for onshore and offshore pipelines, natural gas storage, LNG terminals, and gas transmission and distribution throughout Britain. He also has an interest in the emerging Carbon Capture and Storage industry and its need for the bulk transport of CO₂ by pipeline. Since 2003 he has been very pleased to have had the challenge of working with the gas industry in a period of change – of ownership, of sources of supply, and of transmission infrastructure.

He is a mining engineer by profession and joined HSE as a Mines Inspector in 1987 after working for British Coal for 14 years in various management roles.

Shane Wakefield, HM Inspector of Health and Safety, Health and Safety Executive

HM Inspector of Health and Safety working for the previous six years within the Gas and Pipelines Unit. Helped develop the Unit's PE Integrity inspection and enforcement policies. Lead Inspector for Northern Gas Networks.

Dave Hutchison, Head of HS&E, Northern Gas Networks

Dave, a Chartered Engineer and Chartered Safety Practitioner with nearly 32 years experience in the gas industry, started as a service engineering apprentice, progressing to work in customer service; distribution; transmission; system control and corporate audit. He holds a BSc (Honours) in Natural Gas Engineering (Salford University), Masters Degree in Business Administration, MBA (Manchester Business School) and Post Graduate Certificate in Occupational Safety and Health, PgC (University of Portsmouth).

Peter Christie, HS&E Manager, UUOL

Peter, who holds a B Eng (Hons) Mechanical Engineering, joined the industry in 1977 as a Pressure Control Apprentice and progressed to be a Leakage Control Supervisor by 1987. Following 4 years in this role he moved through Engineering Officer (Distribution mains and Services), Project Engineer (New techniques and procedures), Network Operations Manager (Maintenance Operations and Projects) and Asset Support Manager (Contracts) to become in 2002 Engineering Operations

Manager. He was responsible for replacement and repair support (back office) data quality, work management and as laid records and operationally for repair and emergency activities including delivery of standards of service. Earlier this year he was appointed to his current role.

***Andrew Hopkins, Director of Operations,
Wales & West Utilities***

Andrew Hopkins is Director of Operations for Wales & West Utilities Ltd. An experienced gas engineer, Andrew began his career with an engineering apprenticeship before spending some eight years working as a Craftsman for British Gas. During his career with British Gas and its successors he held a number of managerial positions within varying engineering disciplines and had managerial accountabilities in Wales, the West Midlands and the North West of England.

Andrew was appointed as Head of Operations of the Wales and the South West Network within National Grid Distribution in 2003. The Network was purchased from National Grid by a consortium of investors led by Macquarie Bank of Australia during 2005 and subsequently became Wales & West Utilities Ltd. Andrew was appointed as Director of Operations in 2007 and has responsibility for the delivery of all Network Operations, undertaken by a workforce of over 1,300 directly employed and contract staff. Andrew is a Chartered Engineer, with an honours degree in Mechanical Engineering. He is a member of the Institution of Gas Engineers and Managers (IGEM) and a former chairman of the Wales Section of IGEM.

Ashley Griffiths, Asset & Environment Manager Wales & West Utilities

Ashley joined the South West Gas industry as an Electrical Engineer in May 1984, where his primary roll was associated with major construction projects over a 12-year period. Since then he has spent time as an Operational Manager for Holders, Workshops and Maintenance, as a Pipeline Manager, Asset Electrical Engineer, followed by the lead role with Environmental responsibility since 1998.

His current responsibilities include the development of environmental strategies, systems and processes for the protection of the environment in relation to WWU -- to satisfy statutory, regulatory and investor requirements. This includes Environmental and Sustainability Management systems, asbestos and historical issues associated with Contaminated Land.

Colin Heap, Manager Metering Services, Advantica

Colin Heap is the Manager of Advantica's metering business with responsibility for ensuring that the appropriate skills and resources are sourced to deliver projects successfully to time cost and quality. He manages a team of up to 15 Senior Engineers/Scientists working within a delivery focused environment and is responsible for developing profitable relationships with key stakeholders within the UK and European metering industry.

He has 18 years experience in the gas industry, including an 8 month secondment to Osaka Gas in Japan to develop residential gas fired air conditioning. His previous expertise focused on gas utilisation technology, including gas cooling, cogeneration, and low temperature heat transfer (water heating).

Recently he has been involved with Gas fired air conditioning specialist for Abu Dhabi Natural Gas infrastructure development, Management of Advantica's Shared flue consultancy and inspection service, provided to UK councils and Housing Trusts to meet their health, safety and legal requirements, Project management of technology programmes to promote gas fired air conditioning, combined heat and power and Industrial and commercial utilization, Design & development of novel cooling technologies for residential, commercial & industrial application, Development and

Management of Advantica Gas fired Air conditioning portfolio and the launch and product promotion of commercial gas engine heat pump.

Martin Searle, Legislation and Standards Director, Baxi Group and Member of the Experts Committee for EUPD

Dr Martin Searle started his career in the gas industry in 1980 when he joined the British Gas Research Station at Watson House. In the 10 years he spent there he worked on a number of advanced products for the domestic market and in particular was in at the start of the condensing boiler developments. Martin left Watson House to set up an advanced research group for Baxi. Still with Baxi, Martin is now responsible for Legislation and Standards within the Baxi Group. Most recently this has included a substantial involvement with the activities of the European Commission in establishing the basis for implementation of the EuP Directive.

Yan Evans, Technical Director BAXI, Chairman of the UK Commercial Boiler Group Technical Committee and Chairman of the Commercial Heating Training & Competency Group

Yan Evans is Technical Director for the Baxi Commercial Division with responsibility for the Potterton Commercial and Andrews Water Heaters brands. He is a Chartered Engineer registered in both the UK and Europe and a Member of Institute of Engineering & Technology, the Energy Institute and the Chartered Institute of Building Services Engineers. Yan has an honours degree in electromechanical engineering and around 17 years experience of working within the power generation, energy and building services sectors. He has experience of large gas turbine, micro-turbine and reciprocating engine based power generation and CHP solutions and has worked for GEC Alstom, Volvo Aero Turbines and Advantica as well as establishing and developing Baxi Groups' commercial CHP business in the UK. Yan currently holds the post of Technical Director for the Baxi Commercial Division and heads up the development of their commercial products including renewable technology based solutions such as solar thermal and ground source heat pumps.