



Energy Potential

We provide risk management advisory services, perform due diligence appraisals, create information products and provide market analysis to the Energy Sector, with particular expertise in UK Power Markets.





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Energy Potential

Energy Potential was created by Gary Huish and Andy Pace who have over 40 years' experience in the UK Energy Sector. Both have worked at senior levels and can provide expertise in many aspects of the energy supply chain.

Energy Potential provides advisory services to clients who are developing or changing business strategies in the UK Energy Markets. We develop and review strategic plans, quantify market and regulatory risks, and undertake due diligence assessments.

Energy Potential also develops risk management tools and provides market analysis services. We offer advice and training in many other aspects of the energy industry, ranging from network charging to market data, risk analysis, financial modelling and asset valuation.

Energy Potential supports its clients to maximise the potential within their business. Client satisfaction is paramount to our way of working and our core focus is to help your business succeed.



About Us

Gary has worked across Utilities, Banking and Fund Management. He was Global Head of Commodity Risk for Morgan Stanley, the US based Investment Bank and most recently created the risk and accounting infrastructure for an Investment Manager. He started his career in the UK electricity sector in 1988.

Andy has worked in distribution, generation and supply within the UK electricity sector. He was the Senior Energy Trader at NRG Energy, and helped develop the new UK power distribution charging methodologies while working for Electricity North West. Most recently he worked as a Senior Consultant for Cornwall Insight, advising clients on commercial and regulatory aspects of the electricity industry. Andy also currently sits on the CUSC panel.

Detailed Biographies are appended.



Our Philosophy

- + Understand client objectives and create risk management strategies that support consistent, successful outcomes
- + Transparent, evidence based analysis drives good decisions
- + Detail matters, but analysis needs clear and effective communication



Energy markets are changing...

The UK energy markets are evolving rapidly with emerging technologies, disruptive business models, the continued push for decarbonisation and substantive regulatory change.

Most commentators expect the energy sector landscape to change dramatically over the next ten years as it reacts to these new drivers.

In a dynamic and fast changing environment, the importance of risk management and understanding future change becomes critical.

Energy Potential is active in shaping how the energy market is evolving. We can help you understand the impact of market change and develop strategies to mitigate risk and capitalise on opportunities as they emerge.

Our Services

We help our clients manage risk using clear analysis to provide insightful and practical solutions.

Risk Management

We can identify and quantify the price risks affecting your business

- + business strategy development and review
- + risk frameworks and policies
- + hedging and risk mitigation
- + contract structuring and valuation

Regulation

We can help clients understand their regulatory environment

- + current regulatory advice
- + anticipate regulatory change
- + process hedging approaches to mitigate risk
- + regulatory process benchmarking

Due Diligence

For asset purchases to takeovers we can support

- + strategic assessment
- + market and regulatory environment
- + asset financial modelling
- + contractual T&C review

Analysis

Independent and fact driven analysis, using our own data sets and models

- + fundamental and market driven approaches
- + transparent model approach
- + thoughtful interpretation, clear communication

Risk Management

The measurement and management of Energy Risks requires specialist skills. We believe that forward assessment and planning are vital.

A well-defined risk appetite provides the context to assess a business idea. Clear, detailed analysis helps you identify and quantify risks; an accurate risk representation and the ability to understand risk as its drivers change place you in a strong position to execute a successful strategy.

+ Risk policy and frameworks

- + Governance: defining risk appetite, risk policy frameworks and documentation
- + Creating and calibrating risk controls

+ Risk measurement

- + Risk factor identification
- + Risk models, valuation and risk sensitivities
- + Process design
- + Portfolio risks: VaR

+ Risk Systems and reporting

- + Risk system advice
- + Tailored market reporting



Regulatory Risk

Energy Potential has been actively involved in the development of the regulatory framework within the electricity industry. Andy Pace has chaired numerous Industry Code working groups and is currently a member of the CUSC panel. He is also an Associate for Cornwall Insight where he provides expertise on all things network related.

Gary Huish has experience of the regulatory framework for UK Energy and more recently of the new Banking regulations; introduced by Prudential Regulation Authority in the UK and Federal Reserve in the US. He has a good working knowledge of these regulations and has implemented procedures and monitoring systems, and has authored several firm-level regulatory submissions. Our services in this area include:

+ Inform

- + Inform on the current regulatory regime
- + Identify and assess regulatory change
- + Help manage regulatory change processes

+ Assess impact and develop strategies

- + Bespoke impact assessment of regulatory change
- + Risk mitigation strategies
- + Ensuring compliance and process review



+ Support the change process

- + Support regulator consultations, providing analysis and drafting responses
- + Develop proposals for change and provide representation on working groups
- + Review client operations and benchmark against regulatory requirements

Due Diligence

We have a no 'surprises' mentality. When investing in assets or acquiring a business, it is essential that due diligence is performed by individuals with the correct expertise and knowledge.

We have experience in the analysis and sign off for large, complicated transactions, both paper and asset driven. We can undertake due diligence to a high standard, identifying risks and opportunities.

- + **Strategic review**

- + Assessing the market environment
- + Developing business cases and strategic plans
- + Independent review of client business strategy

- + **Asset valuation**

- + Market price approaches
- + Regulatory risk impacts
- + Valuation scenario development

- + **Cashflow modelling**

- + Return on capital
- + Risk adjusted return

- + **Financial Model Audit**

- + Review and qualify internal valuation schemes
- + Independent model implementation testing
- + Methodology replication



Analysis

We keep up to date with economic analysis in the Energy space and have a good understanding of the analysis methods that other researchers use. We know how to price flexibility and optionality, a value driver often missed in standard economic approaches. We also have expertise in network charging methodologies.

Our experience in analysis allows us to offer bespoke services to our clients. We are able to provide customised market data reports to support timely decisions making.

We are building out our price and fundamental data sets, giving us a robust base for consistent analysis and forecasts.

- + **Market Intelligence**

- + Timely, accurate, organised market data
- + Bespoke reporting that is tailored to meet your requirements

- + **Analysis**

- + Impact assessments and stress testing
- + Optimisation approaches
- + Trading signals

- + **Model development**

- + Suite of models under development
- + Bespoke analysis tools

- + **Portfolio risk analysis**

- + Our flexible VaR engine supports portfolio risk assessments, including back-testing



Our Biographies

Gary Huish – Director



Education

- + BSc Physics, 1st Class, Manchester University 1988-1991
- + PhD Mathematical Physics, University of Newcastle Upon Tyne 1991 -1995

Summary

Gary has 19 years' experience working in the wholesale energy markets, and has a unique perspective having worked in the Utility, Banking, and Investment Manager Sectors.

Most recently Gary ran the Risk and Finance function of Nanook Advisors, an alternative Investment Company based in London. He built risk, reporting and finance systems, had daily oversight of the asset portfolio, and managed the valuation processes.

Previously Gary was European and then Global Head of Commodity Risk for Morgan Stanley, the US based Investment Bank. He managed teams in London and New York and was responsible for all aspects of Market Risk, and supported Operational Risk. As well as day-to-day trading book oversight, he was responsible for Large Transaction due-diligence, with sign-off responsibilities. He helped design risk systems, risk limit frameworks, and risk-reporting processes. He had significant interaction with regulators (in the US and UK) and authored several regulatory submissions.

From 2006 Gary worked for Tudor Investment Corporation, a global asset investor, as an Energy Investment Strategist. He developed investment ideas across the Commodity space, requiring fundamental and technical analysis, model development, and price and asset value forecasting.



Gary joined Barclays Capital - the Investment arm of Barclays Bank - in 2002 as they expanded their Commodities business unit. He supported the UK and European Power and Gas business, specifying trading and risk infrastructure requirements. He was the Risk Manager for the business, and was also responsible for any model used for Balance Sheet valuation in the wider Commodity business; model fair value approvals, Value-at-Risk, balance sheet valuation adjustment methodologies.

Gary entered the industry in 1998 with Norweb Energy, as a Risk Analyst. He helped manage the energy supply portfolio, and was involved in managing the transition from the Pool to NETA trading arrangements. After a takeover by Texas Utilities (TXU), he worked in Geneva as a Trading Risk Manager, building and implementing risk systems and overseeing the European Trading and Asset portfolios.

Skills and capabilities

Gary has exceptional experience that spans the trading and energy risk space, and more broadly the commodity space. He has worked at a senior level and understands the need for consistent, clear communication and has presented complex ideas to senior, non-specialist forums. He has worked on large, complicated projects and values good planning and organisation, and well-defined process with clear deliverables.

He is an experienced pricing and risk analyst, and modeller, and has a broad base in economic forecasting. He is highly proficient in Excel modelling, with excellent skills in more advanced approaches (C++, .NET languages). He has built and implemented risk systems, data gathering systems, forecasting processes and systems, and trade decision support systems.



Andy Pace – Director



Education

- + MBA, Manchester Business School, 1996-1999
- + BSc (Hons) Building Surveying, Liverpool John Moores University, 2005-2008
- + BA (Hons) Business Studies, Portsmouth University, 1990-1994

Summary

Andy has over 20 years' experience within the electricity industry where he has worked within Supply, Generation and Distribution.

Since 2015, Andy has worked as a senior consultant for Cornwall Energy. This wide-ranging role included advising clients on a range of projects such as investment cases for generation and storage sites and undertaking due diligence for acquisitions. In addition, Andy has been an active participant in the long running embedded benefits debate, writing a published report assessing the cost reflectivity of embedded benefits for the Association of Decentralised Energy and active participation in the working group looking at amending the value of triad benefit (CMP264/5). Andy also ran the Cornwall Energy flexibility forum which is a monthly seminar providing information and analysis on the market for flexibility services, served on the CUSC panel and regularly ran training courses for clients. Andy continues to work as an Associate for Cornwall Energy on a part time basis providing expertise on network related matters.

Prior to his position at Cornwall Energy, Andy spent 6 years in networks as the Charging Manager for Electricity North West. In this role, Andy represented Electricity North West in negotiations to agree new national distribution charging methodologies at low voltage, high voltage and extra high voltage. As part of this process, Andy chaired work stream C which looked at transparency and volatility issues associated with the extra high voltage charging methodology and also chaired the Methodology Issues Group.



Andy has also gained valuable experience in a range of other roles within the electricity industry. Andy was Senior Energy Trader for NRG based at their European Headquarters in Canary Wharf where he was responsible for setting up and running their trading desk to trade power and gas for Killingholme and Enfield power stations. Andy has also traded power for First Hydro who owned the Dinorwig and Ffestiniog pumped storage assets in North Wales. He was also a contract negotiator for the Norweb supply business where he was involved in negotiating complex and high value power purchase agreements. Andy has passed his SFA exams which enables him to trade electricity derivatives.

Skills and capabilities

Andy has a broad experience that spans the electricity supply chain. He has experience of managing complex regulatory projects and bringing them to a successful conclusion. Andy is a positive individual who enjoys challenging work and will go the extra mile to get the right solution. He has excellent written and oral skills and one of his most valuable assets is the ability to explain complicated concepts in an easy to understand way.



Mo Sukumaran - Associate



Education

- + BA (Mathematics, Statistics and Computing), Open University UK, 1991
- + Higher National Diploma in Electrical & Electronic Engineering, Portsmouth Polytechnic and Southern Electricity Board Engineering Scheme, 1978-1981
- + IIE : Incorporated Engineer, 1987-1993
- + Member of the Institution of Engineering and Technology (MIET)

Summary

Mo worked for Scottish and Southern Electricity Networks (part of SSE plc Group) for over 38 years and held various Engineering and Commercial roles. He started his career as a trained power engineer working in electricity distribution networks including over 7 years in system planning (up to 132kV). He joined Commercial in 1989 and was closely involved in electricity privatisation work on distribution charging policy and use of system tariffs. In 1996, as Head of Distribution Pricing, he was responsible for setting Southern Electric's distribution use of system tariffs and charging policy. Following the merger in 1999 with Scottish Hydro Electric, Mo was appointed Pricing Manager responsible for setting licence compliant transmission owner charges, distribution use of system charges (for networks owned and operated in England, Wales and Scotland) and supporting commercial / regulatory arrangements (revenue c £1.2bn in 2016). Over the years Mo has engaged with SSE, Ofgem and industry Senior Management on matters relating to network charging. He has also provided charging advice to SSE teams developing innovation project bids to Ofgem and to customers seeking clarity use of system tariffs.

In 2004/05 Mo was part of the BETTA Project team's Charging work stream which delivered new GB electricity trading arrangements on 1 April 2005.

Mo was also involved in setting Scotia Gas Networks (SGN) LDZ transportation charges for two years following SGN's acquisition from National Grid Transco in June 2005.



Mo has been extensively involved in industry in developing transmission owner and distribution charging methodologies including holding a number chairmanship - Transmission Charging User Group, ENA Common Methodologies Group, Distribution Charging Methodologies Forum (DCMF) and DCUSA working groups.

Mo is currently the Principal Consultant with Intellect Partners and an Associate for Energy Potential.

Skills and capabilities

Mo has substantial broad engineering and commercial experience in electricity networks. He has developed extensive network charging expertise over the years and his proactive contribution and leadership is well respected in the industry. He has managed multi-discipline teams to deliver challenging and complex projects.

Contact details

Please visit our website www.energy-potential.com

Please contact either of our directors using the details below to discuss our services or for general enquiries email us at Enquiries@energy-potential.com

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