



Glasgow

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Education

PhD Mechanical Engineering
(Cranfield University, England)

BSc/BS Mechanical
Engineering
(University of Strathclyde,
Scotland)

Expertise

Data analysis and processing

Computational fluid dynamics
(CFD)

Wind flow modelling

Energy yield assessment

Due diligence

Selected Experience

Technical Leader
(Wood/SgurrEnergy)

Specialist, hydraulic systems
(Weir Pumps/Clyde Pumps)

Design Engineer
(Weir Pumps/Clyde Pumps)

Dr Roy Spence

Associate Director

Dr Roy Spence is an Associate Director in RCG's technical advisory team. He has extensive experience in wind resource and site conditions related assessments covering over 55 GW of wind farm developments worldwide.

Dr Spence's expertise in wind resource assessment covers pre-construction, operational and due diligence assignments for both offshore and onshore assets. He provides key advice to clients focusing on mitigating technical risks, reducing production uncertainty and optimising asset performance throughout the project lifecycle.

Before joining RCG, Dr Spence led a team of analysts at a major renewable energy consultancy for several years. He was responsible for directing analysis and measurement methodologies to ensure they were robust, efficient and provided clients with high quality deliverables. He introduced and integrated computational fluid dynamics wind flow modelling within the consultancy as well as assisting with the development of wind farm optimisation methodologies with the service line. He has conducted independent wind resource/site conditions and due diligence assessments on over 30 GW of offshore wind farm developments across Europe, Asia and North America. He has also conducted analysis related assessments on over 400 onshore wind farms worldwide.

Dr Spence is a qualified mechanical engineer and has a postgraduate doctoral degree related to computational fluid dynamics and turbomachinery. He is a Chartered Engineer and is a Professional Member of the Institution of Mechanical Engineers (IMechE). He is also a member of the IEC 61400-15 Standards Working Group.

Representative Assignments

– Energy yield assessment, onshore wind (Nordics)

Led a team of analysis working on a 150+ MW wind farm developed in multiple stages. Conducted pre-construction and operational energy yield assessments for initial development phases as well as optimisation and feasibility studies for later phases.

– Technical due diligence, offshore wind (Asia)

Conducted lenders due diligence of multiple pre-construction energy yield assessments for two offshore wind farms, which considered both mast and floating lidar datasets.

– Measurement campaign review / energy yield assessment, offshore wind (North America)

Review of an offshore measurement campaign strategy, providing recommendations to mitigate risk and reduce associated uncertainties. Also involved in the delivery of an independent energy yield and site conditions assessment for the offshore wind farm.