

Joint EGGS and BGA Evening Meeting

Wednesday 15 February 2017 18:00

Burlington House, Piccadilly, London W1J 0BJ

Wylfa Power Station – Rock mass classification and engineering seismology

Vix Edmonds (Atkins Ltd) and Dr Matthew Free (Arup)

Summary:

Extensive ground investigations have taken place at the Wylfa Newydd site in Anglesey, north Wales, where Horizon Nuclear Power are planning a new build nuclear power station. Since 2010 there have been six significant ground investigations for Wylfa Newydd, where approximately 450 boreholes have been drilled producing around 18,000m of rock core. The first part of the presentation will focus on the most recent detailed onshore and offshore investigations which were carried out in 2014 and 2016 respectively, discussing the local geology, the drilling, logging and testing, including how and why a site-specific rock mass classification scheme was developed as part of the geotechnical engineering design. The second part of the presentation will focus on the engineering seismology aspects of the site and discuss the Probabilistic Site Hazard Assessment involved for a nuclear new build site.

Speakers:

Vix Edmonds MSci, MSc, FGS, CGeol is a Senior Engineering Geologist with Atkins who graduated with a degree in geology from University of Bristol and an MSc in Engineering Geology from Imperial College. Prior to joining Atkins in 2012, Vix has had extensive experience in site investigation and engineering consultancy in the UK and Western Australia, respectively. She works within the Energy Geotechnics sector and has been involved with infrastructure projects in the UK and overseas. Vix has been part of the team working on the Wylfa Newydd project since early 2014.



Dr. Matthew Free is a director of Arup and leads the Arup natural hazard and risk management team for the UKMEA region. He is a chartered scientist and chartered geologist with over 27 years of experience working on major infrastructure projects worldwide. Throughout his career he has worked with large multi-disciplinary teams undertaking the design of large infrastructure projects including oil and gas facilities (on and off shore), pipelines, power stations including nuclear facilities, dams, highways and railways, tunnels, bridges, industrial facilities, as well as high rise commercial and residential buildings.

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