

IWEA

WIND SKILLNET

Health & Safety

Reaching for Safety Excellence in Wind

Wednesday 15th June 2011

ElecTEC 11

Better Technology = Higher Yields

Thursday 16th June 2011

Conrad Hotel

Earlsfort Terrace

Dublin 2





Irish Wind Energy Association

Save the Date



IWEA Annual Golf Event

Wednesday 5th October 2011

Killarney Golf & Fishing Club

Registration available soon



IWEA Autumn Conference

Thursday 6th October 2011

INEC, Killarney, Co. Kerry

Sponsors:



Malachy Walsh and Partners
Consulting Engineers



Pre-Conference Dinner

Wednesday 5th October 2011

The Brehon Hotel, Killarney, Co. Kerry

Sponsors:



Limited Sponsorship
Opportunities Now Available

Registration available soon at
www.iwea.com

Health & Safety

Reaching for Safety Excellence in Wind Wednesday 15th June 2011

8:00am Registration & Coffee, Exhibition Viewing

Session 1 **Building Renewable Energy: Reaching for High Standards.**

Chair: Stephen Wheeler, IWEA Chairman

09:00 Welcome Address

Stephen Wheeler, IWEA Chairman

09:10 Context for the Day

Michael Walsh, Inspector, HSA

09:25 Developing an Industry Standard & Lessons Learned

Paul Whelan, Chair of IWEA Health & Safety Strategy Group, Safety & Environment Manager, SSE Renewables & Michael O'Grady, Chair of IWEA Construction Safety Group, Health & Safety Manager, ESB Wind Developments

10:00 Influence of Windfarm Design/Construction on Turbine Installation

Declan Corrigan, Technical Manager, Wind Hoist

10:20 Designing in Safety - A Practical Example

Sarah Stapleton, Geotechnical Engineer, ESB International

10:30 Tea, Coffee & Exhibition Viewing

Session 2 **Emergency Response**

Chair: Johanna Cafferkey, Network Manager, Wind Skillnet

10:50 Briefing on Industry Risk and IWEA Activity

Michael Bermingham, Chair of IWEA Emergency Response Group, Operations Safety Coordinator, ESB International

11:00 Emergency Communications

Tony O'Brien, Head of the Emergency Call Answering Service, ComReg

11:15 Dealing with Fires in Windfarm Environments

Keith Leonard, Assistant Fire Advisor, National Fire Service, DOE

11:30 Accidents & Ambulance Response

Pat McCreanor, Command and Control Reconfiguration Project, National Ambulance Service

11:45 Irish Coast Guard

Hugh Barry, Operations and Training Officer, Irish Coast Guard

12:00 Wrap Up

Michael Bermingham, Chair of IWEA Emergency Response Group, Operations Safety Coordinator, ESB International

12:10 Q&A

Panel

12:20 Lunch

Session 3 **Wind Turbine Logistics & Transport Safety**

Chair: Kevin Moloney, Head of Renewable Energy, Siemens Ireland

Session Sponsor: 

13:30 Lessons Learned: The Big Incidents

Mike Boyce, Environment, Health & Safety Manager, GE Energy

13:45 Learning from Experience/Reaching for High Standards, an IWEA Code of Practice for Transport

Paul Whelan, Chair of IWEA Health & Safety Strategy Group, Safety & Environment Manager, SSE Renewables & Mark Hartley, Health & Safety, Vestas

14:15 Challenging Sites & Logistics

Carsten Pedersen, Sales Director, BMT

14:35 Tea, Coffee & Exhibition Viewing

Session 4 **Workshop**

15:00 Workshop

All Participants

15:20 Workshop

All Participants

15:40 Workshop

All Participants

16:00 Workshop Wrap-Up

Paul Whelan, Chair of IWEA Health & Safety Strategy Group, Safety & Environment Manager, SSE Renewables

16:30 Close

Michael Walsh, CEO, IWEA

16:30 Conference Close

ElecTEC 11

Better Technology = Higher Yields Thursday 16th June 2011

This event will consider the new technologies that are being introduced to power systems. The event will particularly focus on measures that will allow improved utilisation of renewable generation assets. It will look at enabling technologies such as Electric cars and demand participation, system control measures to facilitate greater deployment of renewables and an overview of operating experiences from across the world. The speakers are leading international and national experts in their fields. This event will be a unique forum and is a must attend event for anyone interested in technical solutions to improve the yield from renewable generation.

8:00am Registration, Tea, Coffee & Exhibition Viewing

Session 1 **Advanced Power Systems - Chair: Michael Walsh, CEO, IWEA**

09:30	Opening Address	Minister Fergus O'Dowd, T.D. Minister for NewEra
09:40	Developing Ireland's Network of the Future	Denis O'Leary, Head of Systems and Sustainability, ESB Networks
10:10	Operational Constraints in a high Wind Power System	Alan Mullane, Principal Consultant, Ecar Energy
10:30	Q & A	

10:45 Tea, Coffee & Exhibition Viewing

Session 2 **Managing Turbines for Performance**

11:15	Review of Wind Farm Insurance Claims	Trules Kjer, Risk Engineer RSA
11:35	Inertia and Frequency Control in Wind Turbines	Björn Andresen, Head of Department-Wind Farm Electrical Interface, Siemens
11:55	Impact of Wind Generation Ramp rate Constraints	Kevin Tevnan, Project Engineer, Wind Prospect
12:15	Q & A	

12:45 Lunch

Session 3 **Power System Management**

14:00	Application of Storage Technologies on a Power System with high Wind Penetration	Keith McGrane, Head of Offshore Energy and Electricity Storage, Gaelectric
14:20	Real Time Wind Stability Tools in Electric Control Centre	Ivan Dudurych, Operations Study Group Leader, EirGrid
14:40	The evolution of Windfarm Substation Technologies	Martin Keane, Engineering Manager, Power Products & Systems, ABB Ireland
15:00	Q & A	

15:20 Tea, Coffee & Exhibition Viewing

Session 4 **Active Market Participation**

15:45	Demand Side Units in the SEM	Patrick Liddy, Managing Director, Activation Energy
16:05	Enabling More Trade across Interconnectors	Iain Wright, Regulatory Manager Ireland, Airtricity
16:25	Enabling Broad Adoption of Demand Response	Jerry Sweeney, Managing Director, Cork Internet Exchange
16:45	Q & A	

17:00 Close

Stephen Wheeler

IWEA, Chairman



Stephen Wheeler is Managing Director of Airtricity, a wholly-owned division of the FTSE 100-listed SSE (Scottish and Southern Energy plc) Group and Ireland's fastest-growing energy supply utility, and Chairman of the Irish Wind Energy Association (IWEA). He was previously General Manager Ireland of SSE Renewables with responsibility for the company's development and construction activities in the Irish and marine markets. Stephen came to Airtricity with over 10 years international experience after working with ABB and Siemens, specialising in the development and construction of thermal power generation projects. He is a graduate of electrical engineering from University College Dublin with an MBA from the UCD Michael Smurfit Graduate Business School.

Michael Walsh

Health and Safety Authority



Michael graduated with a Bachelor of Engineering (Civil) (Hons.) from University College Galway and has a Graduate Diploma in Project Management from Trinity College Dublin, and a Diploma in Occupational Safety and Health from University College Dublin. He is a Chartered member and Fellow of the Institution of Engineers of Ireland (Engineers Ireland).

He works as an Inspector with the Health and Safety Authority. He has been involved in many aspects of the Authority's compliance activities, including the inspection of windfarm installations. He is currently assigned to the Policy and Technical Division where his work activities include the development and updating of regulations and guidance, researching technical issues and drafting policy documents, and representing the Authority on technical working groups.

Paul Whelan

Chair of IWEA Health & Safety Strategy Group and Safety & Environment Manager, SSE Renewables



Paul Whelan is Chair of IWEA Health & Safety Strategy Group and Safety & Environment Manager at SSE Renewables. Over the years, he has developed a deep understanding of the risk environment and safety challenges we face in building renewable projects. He has been deeply involved in driving higher safety performance standards in over twenty wind farm construction projects, bringing SSE and

its construction partners beyond the journey of compliance to standards of safety excellence. Prior to joining SSE Renewables, he worked in environmental enforcement at local government level, and as EHS Manager for over eight years in the heavy engineering sector. On his career path, Paul has achieved high standing in the safety community, winning the prestigious IOSH Safety Practitioner of the Year Silver Award. He has also sat on the Board of Directors of ECO-UNESCO.

Michael O'Grady

Chair of IWEA Construction Safety Group and Health & Safety Manager, ESB Wind Developments



Michael is Chair of IWEA Construction Safety Group and the Health & Safety Manager in ESB Wind Development. He took over this role in October 2009 having spent the previous 8 years in various safety roles in ESB Networks and Networks Safety Services Manager immediately prior to taking up the Wind Development role. Following his electrical apprenticeship with the ESB in the 80's he spent 5 years working as an electrician in London and New York.

He returned to the ESB in 1992 to HV stations where he worked for the next 10 years with a brief stint in System Protection design and supervisor roles. Michael considers himself a "product of the SHAWW '89 act" having started in H&S as a safety rep. representing ESB staff in the mid nineties. Michael has worked on both sides of the Client / Contractor relationship and sees the safe construction of Wind farms being achieved through a partnership approach by all involved. A constant focus on the "Top Risks" to health and safety of workers, the public and others at every stage of the construction project, from concept to hand over, by Clients, Designers and Contractors will deliver a best practice safety performance by Ireland's wind industry.

Declan Corrigan

Technical Manager, Wind Hoist



Declan joined McNally's Crane Hire/Windhoist in June 2000 and is Technical Manager with responsibility for analysis and crane/installation planning to wind projects. From an early marginal involvement with the installation of KW turbines the company has grown to become the largest crane/installation contractor in Ireland & the UK with significant involvement in Western Europe and Australia.

Declan provides technical assistance and installation planning services to key clients including Siemens Windpower, Vestas Celtic and Nordex Energy with particular emphasis on improving infrastructure planning and procedures for safe vehicle transit and crane mobilisation.

Sarah Stapleton

Geotechnical Engineer, ESB International



Sarah is a Chartered Geotechnical Engineer with over eight years experience. Since joining ESB in 2008 she has worked on wind farm projects in Ireland and the UK. She is experienced in scoping and carrying out site investigations, in the geotechnical design aspects of wind farms and in managing geotechnical risks on site during construction. Sarah has worked on advancing ESB's Geotechnical

Risk Management systems, particularly in the area of peat landslide hazard assessments.

Michael Bermingham

Chair of IWEA Emergency Response Group and Operations Safety Coordinator, ESB International



Michael Bermingham is Chair of IWEA Emergency Response Group and ESB wind operations safety coordinator. He took a lead role in implementing the RenewableUK Wind Turbine Safety Rules on all ESB sites beginning with Carnsore Point windfarm in 2008. Michael has worked with ESB for 7 years and has been a part of the wind operations team since 2007. A qualified

mechanical engineer, he previously led the project for compliance with the Explosive Atmospheres (ATEX) Directive at Dublin Bay Power Plant and has worked for GE Sensing as a commissioning and service engineer in the Oil & Gas industry.

Tony O'Brien

Head of the Emergency Call Answering Service, ComReg



ComReg has the statutory responsibility to monitor the Quality of Service ("QoS") and the financial performance of the ECAS and report to the Minister accordingly. Tony has been heavily involved in rollout, for implementation and integration of the new ECAS in Ireland and has developed a new website www.112.ie to help promote

the awareness of the pan-European number and its proper use. Previously: 14 years managerial experience across a number of various disciplines and industries at home and abroad. Education: Masters in Business Administration from Henley Management College, London & University of Reading Dip in Business Finance, Irish Management Institute, Dublin Dip in Business Studies, Cork Institute of Technology, Ireland PRINCE2 Project Management Practitioner

Keith Leonard

Assistant Fire Advisor, National Fire Service



Keith Leonard, Assistant Fire Advisor at Government, Department of the Environment Heritage & Local Government Keith areas of specialisation include emergency management, fire service ICT and Control Centre management. Keith has been involved

in supporting the national response to three recent severe weather responses. Keith current role includes co-ordinating various national emergency management's initiatives and he was involved in the design and implementation of Exercise Orion, which took place in the UK, September 2010. His work also includes project development in the areas of risk analysis and emergency services ICT Systems for the fire service. Previous experience includes his time as Regional Control Manager with Dublin Fire Brigade. During this period Keith was involved in the specification and design of the fire service Computer Aided Mobilisation Project at national level and he led a project to establish a Regional Control Centre to process fire service 999 calls for Leinster and Cavan/Monaghan. Keith also represented the fire service on both the Department of Finance's National Digital Radio Project (Tetra) and the Department of Communications, Emergency & Natural Rescues' Emergency Call Answering Project.

Pat McCrenor

Command and Control Reconfiguration Project, National Ambulance Service



I commenced working in the Ambulance Service with the former North Eastern Health Board in 1975. I worked in the Regional Command and Control Centre from then until 1979 as an Emergency Medical Controller and joined the operational Ambulance crews on frontline duty in late 1979. I continued working on frontline Ambulances until

1993 In 1993 I was promoted to the position of Ambulance Officer and in 1996 I joined the former Eastern Health Board Ambulance Service as Assistant Chief Ambulance Officer until 1999. In 1999 I was promoted again to Chief Ambulance Officer in the former Eastern region with operational and strategic responsibility for Dublin Wicklow and Kildare. Advances in training of staff included, Paramedic and Advanced Paramedic training which was introduced in 1998 and 2000 respectively. Currently I am responsible for the National Ambulance Service Command and Control Reconfiguration Project, which will see the current nine Ambulance Control Centres move to one system over two sites, one in the East of the Country and the other based in the North West area of Ballyshannon.

Hugh Barry

Operations and Training Officer, Irish Coast Guard.



Hugh is an Operations and Training Officer in the Irish Coast Guard. He is mainly concerned with Pollution and Salvage Branch duties but also acts as a member of the Call-out system for providing advice and recommendations for the operational staff in the three Marine Rescue Centres in Ireland. He is expected to perform the duties of

an Incident Manager at the scene of incidents occurring on or near the coastlines. Hugh served in the Merchant Navy as a Radio Officer before coming ashore to work in Shannon Aeradio, Ballygrireen, as part of a coordination team dealing with Transocean air traffic. After a second spell at sea he eventually ended up in the Operations Room in the Marine Rescue Coordination Centre (MRCC Dublin). His duties there included routine broadcasting of weather and navigational warnings as well as the planning and coordination of incidents concerning marine casualties and helicopter operations in conjunction with Mountain Rescue teams. For the last three years Hugh has served in his present role. This role includes the approval of Oil Spill Contingency Plans for Local and port authorities as well as for the offshore industry.

Kevin Moloney

Head of Renewable Energy, Siemens Ireland



Kevin Moloney is the Head of Siemens Renewable Energy in Ireland. Kevin is responsible for the development and growth of Siemens renewable energy business and focuses primarily on wind power development. Siemens is the No.1 Offshore Wind Turbine Supplier and aims to maintain and strengthen this position in the market and

sustainably develop our Onshore portfolio in Ireland.

Mike Boyce

Environment, Health & Safety Manager, GE Energy



Michael Boyce is the Global Environment, Health & Safety Manager of GE Energy's Logistics Organization, headquartered in Greenville, South Carolina, USA. He also manages project EHS risk evaluation for special business developments for the Global Developments and Strategic Initiatives team.

The Energy Logistics Organization manages the global shipment of raw materials, components and Energy products, such as Gas Turbines and Wind Turbine Components. The team does this by sourcing and managing third party transportation, stevedoring, warehousing and surveying entities. Mike Boyce, a citizen of the UK, has worked for GE for the past 12 years in EHS, building and managing global safety programs aimed at protecting employees, protecting the environment and managing supply chain risks to help GE protect its global reputation.

Johanna Cafferkey

Network Manager, Wind Skillnet



Johanna has been with IWEA for almost three years. She is responsible for running Wind Skillnet, an enterprise led training network for wind energy in Ireland which has, to date delivered almost 2000 training days. Johanna is also tasked with facilitating the delivery of a suite of best practice documentation in Health and Safety for the wind industry in Ireland. Prior to IWEA Johanna sat on the strategic management board of Adecco Ireland and spent six years in Hewlett Packard in Business Development and Government and Public Affairs. Johanna holds an honours degree in Business Management and a MSc in Psychology.

Michael Walsh



CEO, Irish Wind Energy Association

Michael Walsh joined IWEA as CEO in November 2007. IWEA is the national association for the Irish wind industry. Prior to joining IWEA Michael was manager of market development at EirGrid where he played a key role in the successful development of the Single Electricity Market. He

was previously Manager of Ancillary Services at EirGrid and a lecturer in Electronic Engineering at UCD. Michael has a B.E., a Ph.D. and an MBA from UCD.

Minister Fergus O'Dowd, TD.

Minister for NewEra



Fergus O'Dowd is a TD for the Louth Constituency and is currently Minister of State for the NewEra Project. He was born in Thurles Co. Tipperary and lives in Drogheda where he has held office as Mayor of Drogheda on three separate occasions. He is married to Agnes Thornton and they have three sons. He is a brother of Niall O'Dowd,

the Irish American Publisher. He went to secondary school in Drogheda CBS and then went to the Crawford Institute in Cork City where he qualified as a Science Teacher. He taught in St Oliver's Community College Drogheda and in 1997 was elected to the Seanad. Elected to the Dail in 2002 he was named as TD of the year by Magill Magazine in 2007 for his campaign in exposing abuses in Irish Nursing Home Care.

Denis O Leary

Head of Sustainability and Systems, ESB Networks



Denis O Leary graduated with a degree in Electrical Engineering from UCC in 1980, and joined the Electricity Supply Board (ESB). In his time with ESB, Denis has served in a number of positions mostly in Distribution and Transmission Networks planning and construction. Denis was appointed Networks Operations Manager for ESB Networks in 1997 and as Head of Asset Management and Regulation in 2003. He has recently taken up the position of Head of Sustainability and Systems, with specific responsibility for ESB's Smart Networks, Smart Metering, I.T. and Telecomms strategies. Denis is also ESB's representative on the Eureka Smart Grids Committee, and is a member of EPRI's Distribution Executive Committee on Intelli Grids.

Alan Mullane

Principal Consultant, Ecar Energy



With over 12 years experience and as a principal consultant with Ecar Ltd. since 2006 Alan has delivered high value consulting and industry commissioned research in renewable energy and power system operation together with bespoke energy market analysis for government, semi-state and commercial clients spanning three continents. Examples of recent works include the analysis that Alan

delivered for EirGrid which underpinned the main findings of the Facilitation of Renewables Studies. In early 2011 Alan joined the energy trading and market services company ElectroRoute as director of market intelligence. Alan holds a bachelor's degree and Ph.D. of Electrical Engineering from University College Cork, Ireland.

Truels Kjer

Rick Engineer, RSA



Truels Kjer graduated as engineer from the Technical University of Denmark in 1979. He has been working 10 years with consulting engineering companies and 20 years in the insurance industry, both with insurers and brokers. Primarily with risk assessment, claims

handling and product development within technical lines, including onshore and offshore wind turbines. Truels Kjer is participating in the Danish standardisation work and is advisor for The Danish Energy Authority as a representative of the Danish insurance industry.

Björn Andresen

Head of Department-Wind Farm Electrical Interface, Siemens



Björn Andresen, received his B.Sc. from Kiel in Germany in 1996, his M.Sc. EE in 1998 from Aalborg University in Denmark, and his EBA from Vitus Bering University College in 2009. From 1998 to 2003 he worked at Vestas Wind Systems, latest as head of the power control group and as project manager for a new turbine with grid

code compliance for the Australian market. From 2003 to 2008 he has been working at Gamesa Wind Engineering as Section Manager for the electrical department in Silkeborg, furthermore he was the manager of the power converter group in the Gamesa R&D department in Spain. Since December 2008 he works for Siemens Wind Power as Head of department – Wind Farm electrical Interface - which belongs to the Engineering department in Siemens Wind Power. The Wind Farm Electrical Interface department provides the overall electrical interface to SWP wind turbines and related systems. This means the design, implementation and technical support in terms of power -, communication - and control systems. He is a member of several national and international standard committees for Converter design and grid connection of Wind turbines. He is furthermore the inventor of various patents and author and coauthor of several articles in the wind turbine area.

Kevin Tevnan

Project Engineer, Wind Prospect



Kevin Tevnan is a Project Engineer with Wind Prospect Ireland and specialises in SCADA systems, Grid Code Compliance and Performance Analysis. Prior to joining Wind Prospect he gained over 14 years of experience working in the IT sector in a number of Project Management and Technology Consultancy roles. This experience included 10 years with Intel Ireland followed by a number of years working as an independent Project Management consultant in both the Energy and financial services sectors.

He holds a B.Eng in Electrical and Electronic Engineering, a PgDip in Computing and a M.Eng in Renewable Energy Systems.

Keith McGrane

Head of Offshore Energy, Marine and Electricity Storage



Keith joined Gaelectric in June 2008 from Barclays Bank where his role was relationship director for structured finance in Ireland with a particular focus on energy and renewables financing. Previously employed as Airticity's offshore wind division corporate finance executive, Keith worked on Ireland's first offshore wind farm. He has conducted investment assessments with KBC Bank in major oil/gas, mining and wind energy transactions in Europe. Keith graduated from UCD with an honours degree in geophysics and following graduation worked as a scientific researcher with the Dublin Institute for Advanced Studies, specializing on the geophysical investigation of offshore western Ireland. His research has been published in the world leading Geological Journal of London.

Ivan M. Dudurych

Operations Study Group Leader, EirGrid



Ivan M. Dudurych received his EE Degree (with Honor) from National University "Lviv Polytechnic" in 1980 and his Ph D from National University "Kyiv Polytechnic" in 1990. He is an Associate Professor of the National University "Lviv Polytechnic", Ukraine where he worked from 1985 to 2001. In 2001-2003 he was awarded a Newman Fellowship at University College Dublin where he worked on issues of lightning protection of 110 kV network in Ireland. From 2003 he

is with EirGrid, the Transmission System Operator for Ireland. Currently he holds a position of Operations Studies Group Leader. He has published more than 60 papers. He is a Chartered Engineer of Engineers Ireland, Senior Member of IEEE, and Member of CIGRE. His interests include analysis of electric power system operations through modeling and simulation in all timeframes, lightning performance and protection of power systems, integration of renewable sources of energy into power systems, and power system stability and security.

Martin Keane

Engineering Manager, Power Products & Systems, ABB Ireland



Martin Keane is Engineering Manager in the Power Systems division of ABB Ireland. He has worked with ABB for over 20 years, and has been involved in the design and delivery of substations and substation equipment for utility and industrial applications, and, particularly in recent years, several windfarm grid connections. He has a degree in Electrical Engineering from U.C.C. and is a chartered member of Engineers Ireland.

Patrick Liddy

Managing Director, Activation Energy



Patrick Liddy is an electrical engineer who has worked in a range of energy related roles with large industry, commercial organisations and state agencies. He founded Activation Energy in 2006 to provide energy consultancy on energy policy, renewables and energy efficiency. Activation Energy is currently developing a Demand Side Unit (DSU) in the Irish market to facilitate energy users with flexible electrical load taking part in the SEM.

Ian Wright

Regulatory Manager Ireland, Airticity



Iain Wright is SSE's Head of Regulation for the island of Ireland; having originally joined Airticity in 2002. Since that time he oversaw delivery of Airticity's business readiness programmes for both retail electricity market openings and for the Single Electricity Market. Prior to joining Airticity, he undertook several roles associated with GB retail market deregulation and managed pricing and forecasting for Scottish Hydro Electric (SHE). In 1998 SHE and Southern Electric merged to form Scottish & Southern Energy (SSE); the Company that bought Airticity in 2008. Iain is currently Chair of the SEM Modifications Committee.

Jerry Sweeney

Managing Director, Cork Internet Exchange



Jerry Sweeney graduated with a degree in electrical engineering from UCC in 1980. Prior to graduation he did a student placement in Alternative Energy Limited, a wind energy research company. He graduated with an M.Sc. in supply chain management from DIT in 2005. Jerry has followed a career in semiconductor manufacturing, electronics, computer system integration, and software development for more than thirty years. Today he is owner manager of two related

businesses. He owns a software development business and a hyper energy efficient data centre, both located in Cork. Since studying grid synchronous inversion and DC interconnects as an undergraduate, Jerry has maintained a keen interest in renewable energy generation and grid penetration. He is partnering with a number of companies to develop software products in the demand response and smart grid sector.