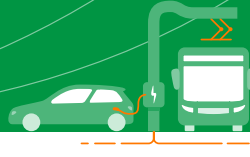


Grid Integration Week

E-Mobility | Solar & Storage | Wind

15 October 2019

Dublin, Ireland



LECTURERS OF THE VRE TUTORIAL



Debbie Lew (Debra Lew LLC, USA)

Debbie is an independent consultant working on utility integration of wind, solar and distributed energy resources. She has 27 years of experience in renewable energy and recently left GE Energy Consulting to focus on challenges and solutions to 100% clean energy. Prior to GE, she spent 16 years at the National Renewable Energy Laboratory, during which time she was seconded to the Hawaiian Electric Company to work on wind and solar integration.

She is the Chair of the IEEE PES Wind and Solar Power Coordinating Committee and a member of SCC21 which oversees the IEEE 1547 standard. She has a BS in EE and Physics from MIT and a PhD from Stanford in Applied Physics.



Nicholas Miller (HickoryLedge, USA)

Nicholas Miller is Principal at HickoryLedge and a retired Senior Technical Director from GE Energy Consulting. He has over thirty years of experience on integration of new technologies into bulk power systems. He has lectured on Wind and Solar Power integration to governments and institutions in more than two dozen countries. He holds twenty US patents for wind or solar technologies, and power control devices.

Nick is a Fellow of IEEE, New York Professional Engineer, and has authored over 150 technical papers and articles. He holds a B.S. and M.Eng. in Electric Power Engineering from Rensselaer Polytechnic Institute, Troy, New York, received in 1979 and 1980.



Jonathan O'Sullivan (EirGrid, Ireland)

Jonathan O'Sullivan has spent over 20 years working in the electricity industry in the planning, operation and markets design. In this time he has developed an acknowledged expertise in the theoretical modelling of the system, the necessary practical operation practices and the requirements for a well-designed and functional market. In recent years Jonathan has been central to the implementation of the first electricity market in Ireland in 2000, the first all island market in 2007, the development of the "Delivering a Secure sustainable power system" (DS3)

programme which will deliver the secure and reliable operation of the Ireland and Northern Ireland power system with unprecedented levels of wind electricity by 2020.

His current role in EirGrid, the transmission system operator in Ireland and Northern Ireland, is Manager Innovation. Through this Jonathan drives general innovation in the group as well as specific technology strategies which include DS3, distributed power flow control devices, solar and storage. To do this Jonathan's team need to consider the future needs of the power system and envisage how these multiple technology strategies may interact at scale. These considerations require technical, economic and government policy considerations.

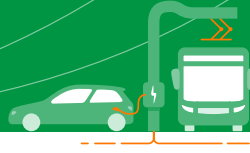
Jonathan is an active member of ENTSO-E, the European association of TSO, where he contributes to working groups and committees on innovation, research, markets and renewables, long term market design and TSO-DSO interaction.

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Thomas Ackermann (Energynautics, Germany)

Thomas Ackermann Ph.D. is owner and CEO of energynautics with over 25 years of world-wide experience in the area of grid integration of renewables and electric vehicles. He provides research and consultancy services to the energy industry, especially regarding power system integration of renewable energies and innovative energy applications, as well as in the area of energy policy, i.e. deregulation of energy markets. He is frequently involved in consulting activities for government departments and electricity service providers on the matter of power system design and operation, as well as regulatory matters and grid code issues. He has successfully completed projects in Australia, Barbados, Chile, China, Costa Rica, Denmark, Germany, Estonia, Guatemala, Honduras, India, Indonesia, Japan, Malaysia, Mongolia, New Zealand, Philippines, Seychelles, Sweden, Thailand, Vietnam and USA.

In addition, he is actively involved as lecturer at Universities and within capacity building courses in the dissemination of knowledge about the integration of renewable energies into existing power systems around the world.