Technical Seminar Jointly Organized by

The Hong Kong Polytechnic University, IEEE PES/IAS/PELS/IES Joint Chapter (HK) and IEEE Communication Society Emerging Technical Committee on Smart Grid Communications

Research for power systems toward 100% renewable energy – a perspective from Denmark

Date: 02 July 2018 (Monday)
Time: 18:30 – 19:30
Venue: **Room TU201, Main Campus, The Hong Kong Polytechnic University**
Speaker: Professor Jacob Østergaard, Technical University of Denmark

Abstract
Green transformation of the energy system towards an affordable, reliable, sustainable and modern system with substantially reduced greenhouse gas emissions is one of the most important global challenges. Denmark has been a front runner in substantially increasing the share of renewable energy in the energy system. In 2017, the Danish wind power production corresponded to 43% of the electricity demand, and the share is continuously increasing toward the target of 50% in 2020. In the presentation the Danish perspectives will introduced and the latest research supporting the development of the most integrated, market-based and flexible energy system based on digital solutions and renewables in a cost-effective manner. Research challenges and solutions related to power system stability, demand response in electricity markets and local optimized energy solutions will be discussed.

Speaker
Jacob Østergaard has been professor at the Electrical Engineering Department at Technical University of Denmark since 2005. He is founding head of the Center for Electric Power and Energy (CEE); with 100 employees it is one of Europe's largest university groups within smart grids. Prior he was 10 year with the Research Institute of the Danish Electric Utilities. His research interests covers integrated, marked-based and flexible energy systems based on renewable energy. The research is characterized by novel application of digital solutions and inclusion of large-scale demonstration e.g. at the Danish island of Bornholm. He is founder of the experimental platform, PowerLabDK. He serves in several boards and been advisor for the Danish Government and the European Commission, latest as member of the Danish government's Energy Commission. His research has received a number of prizes, including the EU Sustainable Energy Award 2016, and he is author and co-author of more than 200 peer reviewed scientific publications, 15 book chapters and more than 50 technical reports.

Additional information:
http://www.dtu.dk/english/service/phonebook/person?id=7328

Note

The seminar is jointly organized by the IEEE-HK Joint Chapter of PES/IAS/PELS/IES, EE Dept of PolyU and IEEE Communication Society Emerging Technical Committee on Smart Grid Communications. No pre-registration is required. Certificate of attendance will be issued.

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Venue Location: