

















WORKSHOP

Modern Power Systems and Smart Grids

School of Electrical, Electronic and Computer Engineering

The University of Western Australia

Billings Room (3rd Floor)

Wednesday, 18 June 2014

INTRODUCTION

In this 4th Smart Grid Workshop of UWA, a number of important issues on reliability and security, power dispatch, microgrids, and energy policy of Smart Grids and Modern Power Systems will be presented and discussed by international, national and local experts and scholars. Organised by the School of Electrical, Electronic and Computer Engineering, The University of Western Australia, the workshop will be held in Billings Room on Wednesday, 18 June 2014. The aims of the workshop are to disseminate ideas and techniques for the development of modern electricity supply systems and to provide a forum for discussions and experience sharing with national and overseas experts. The previous to workshops held in the last two years were well participated by many participants from industry and academia.

This workshop is supported by UWA, Faculty of ECM and School of EECE, Western Power Corporation, Horizon Energy, The University of Sydney, Curtin University, Murdoch University, State Grid Electric Power Research Institute, Nanjing, China, Zhejiang University, China, IEEE Section WA, IEEE Power and Energy Engineering and Power Electronics Chapter WA, IEEE Systems, Man, and Cybernetics (SMC) Society Technical Committee on Intelligent Power and Energy Systems and IEEE SMC Chapter WA. Participation in the workshop is free. Interested engineers, academics, research students and IEEE members are welcome.

REGISTRATION

Registration: by Wednesday 11th June 2014 (first come, first serve until vacancy filled)

Email: admin-eece@uwa.edu.au

Enquiries: Administration Office, School of Electrical, Electronic and Computer Engineering

PH: 08 6488 3106 Email: admin-eece@uwa.edu.au

PRELIMINARY PROGRAMME (Subject to changes)

Workshop Chairperson W/Professor Kit Po Wong

Morning Sessions

9:30 am - 9:35 am: Welcome

Professor Brett Nener Head of School of Electrical, Electronic and Computer Engineering, Deputy Dean (International), Faculty of Engineering, Computer and Mathematics UWA

9:35 am - 9:45 am: Open Speech

Mr Michael Wood Director of Department of Foreign Affairs and Trading, WA Office

9:45 am - 10:30 am: Smart Grid Reliability Analyses in Macro Energy Perspective

Professor Yusheng Xue Member of Chinese Academy of Engineering Honorary President, State Grid Electric Power Research Institute Nanjing, China

10:30 am - 11:15 am: Facilitating the connection of flexible loads and generators in network constrained remote areas through active management of Demand and Generator dispatch to maximise power line utilization

Mr Dean Frost, Network Operations Engineering Manager, Western Power Corporation Mr Phillip Capper, Principal Engineer, Network Operations, Western Power Corporation

11:15 am - 11:30 am: Networking Break

11:30 am - 12:15 pm: Smart Grids – do they fit into a real network?

Mr Laurie Curro Manager Capacity Management services Horizon Power

12.15 pm - 12:45 pm: Cyber-physical security and vulnerability assessment for a smart grid

Professor Zhaoyang Dong Immediate AusGrid Chair HOS, School of Electrical and Information Engineering, The University of Sydney

12:45 pm - 2:00 pm: Interval

Afternoon Sessions

2:00 pm - 2:45 pm: Energy policy settings in support of renewables

Dr Justin Wood Energy Studies, School of Engineering & Information Technology Murdoch University

2:45 pm - 3:30 pm: On Aspects of Renewable Power Generation and Energy Storage

Professor San Shing Choi School of Electrical & Electronic Engineering Nanyang Technological University

3:30 pm - 3:45 pm: Networking Break

3:45 pm - 4:30 pm: Smart Microgrid Cluster

Professor Arindam Ghosh Department of Electrical and Computer Engineering Curtin University

4:30 pm - 5:15 pm: Micro-grid techniques: a demonstration project in Zhejiang University

Dr Zhen Wang College of Electrical Engineering Zhejiang University China

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