

EES - UETP Course on HVDC and HVDC Grids for Future Transmission

Information

From December 2-5, the EES-UETP Course on HVDC and HVDC Grids for Future Transmission will be organized in the city of Leuven, Belgium.

A previous version of this course "HVDC for Offshore Grids" was organized by Universitat Politecnica de Catalunya -- UPC in December 2012 and was highly successful. We are now pleased to invite you to the new version of this course hosted by the University of Leuven, Belgium from 2 (noon) to 5 December, 2013. The course is organized in close collaboration with Universitat Politecnica de Catalunya - UPC and the University of Strathclyde.

The course is aimed to researchers, PhD students and industrial participants working in the field of transmission systems in particular HVDC transmission. The course covers following topics:

- DC and offshore grids
- HVDC converter technologies
- HVDC converter control
- Interactions between AC and DC grids
- Protection of systems involving HVDC
- HVDC grid planning and operation

Course program

MONDAY 2nd DECEMBER

Rationale for DC and offshore grids

- Energy Roadmap and the Need for More Transmission, *Dirk Van Hertem - KU Leuven*
- Topologies for Offshore Grids, *Oriol Gomis - UPC*
- HVDC Grid Planning from a Technical Perspective, *Hakan Ergun - KU Leuven*
- Economics of DC Grids, *Keith Bell - University of Strathclyde*

TUESDAY 3rd DECEMBER

HVDC Converter Technologies (I)

- Power Electronic Components for VSC - HVDC converters, *Phil Mawby – Warwick University*
- VSC HVDC Converter Topologies, *Stephen Finney/Lie Xu – Strathclyde*
- Industrial Talk on Converter Technologies, *Lecturer - to be announced*

HVDC Converter Technologies (II)

- Multi - Level Converters, *Mike Barnes - University of Manchester*
- DC-DC converters and DC hubs, *Dragan Jovcic – Univeristy of Aberdeen*
- Industrial Talk on Multi - Level Converters, *Lecturer - to be announced*

WEDNESDAY 4th DECEMBER

HVDC Converter Control

- Control of VSC HVDC Converter Stations, *Stephen Finney/Lie Xu - Strathclyde*
- DC Grid Control: principles, *Jef Beerten - KU Leuven and Agusti Egea - UPC*
- Wind Power Plants Connected to HVDC Systems, *Oriol Gomis - UPC*

Interactions between AC and DC Grids

- Secure Operation of Systems with DC Grids, *Johan Rimez - ELIA*
- AC-DC Dynamic Interactions, *Jun Liang - Cardiff University*
- HVDC@ABB (title to be confirmed), *Magnus Callevik - ABB*

Thursday 5th DECEMBER

Protection of Systems with HVDC

- DC Grid Faults and Protection: problem statement, *Dirk Van Hertem and Willem Leterme – KU Leuven*
- HVDC Protection Systems, *Helder Leite - INESC TEC Porto*
- HVDC Circuit Breakers and DC grid protection, *Robert Whitehouse – Alstom Grid*

Moving towards HVDC Grids (hosted by Friends of the Supergrid)

- HVDC Grid Code, *Edwin Haesen - ENTSO-E*
- TSO Developments with Respect to HVDC Grids, *Alexandre Parisot - RTE*
- Moving Ahead Towards a Supergrid, *Ana Aguado Cornago- FOSG*

Course Location(s)

Main Location: Wolfspoort Auditorium (KU Leuven), Schapenstraat 34, 3000 Leuven, Belgium

Thursday afternoon session: Friends of the Supergrid, Avenue de Cortenberg, 71, 1000 Brussels, Belgium

For more information, please visit: <http://www.hvdc-colloquium.be/>