



Call for Papers

ACROSS BORDERS

- HVDC SYSTEMS AND MARKET INTEGRATION

Lund, Sweden – May 27 - 28, 2015

Symposium organized by the CIGRE Technical Committee with
the CIGRE National Committee of Sweden
Leading Study Committee: C2 (System Operation and Control)
Supporting Study Committees: B4, C1, C4 & C5

INTRODUCTION

Lund combines history and progress as a small city connected to a much larger region. A stroll downtown will take you through narrow and winding streets that have been there since the Middle Ages. Since the city has only 84.000 inhabitants, you will certainly also notice many of the 47.000 Lund University students. The University is in many aspects the heart of Lund – not only can you see its students and buildings all over Lund, but it also drives change: The current expansion of Lund city is closely linked with the construction of two world-leading material research facilities – the MAX IV synchrotron radiation laboratory and the ESS neutron source. The University celebrates 350 years in 2016 and has a history going back to the time just after the Skåne region became Swedish. Before that it was Danish and the Danish Archbishop Eskil stayed in Lund and consecrated the Cathedral in 1145. The Cathedral is close to the “white house” – the main university building and at the highlight of the academic year – the conferment of doctoral degrees – around 200 doctors walk from the “white house” to the Cathedral where they receive diploma, ring and hat or laurel crown.

Lund is an important part of the Öresund region with 3,7 million people and has excellent connections to Malmö and Copenhagen with Copenhagen airport Kastrup little more than 30 min away by train.



BACKGROUND and SCOPE

AC transmission systems generally form the backbone of all national electric power systems and contribute greatly to the welfare and progress of mankind. Historically power systems have been interconnected to make sharing of reserves possible and to improve the reliability in a cost-efficient way. Equally important, differences in energy resources have motivated interconnections such as the 25 kV AC cable laid between Sweden and Denmark in 1915 – the first step towards the Nordic electricity market. More recently the need to manage the large amounts of variable generation in terms of wind power and photo-voltaic generation prompts for system expansion. In this development HVDC may play a major role by connecting asynchronous areas or adding transfer capacity to AC systems as the SouthWest link near Lund in service in 2015 using a VSC-HVDC solution prepared for DC grid operation.

This Symposium aims at bringing together expertise in HVDC, system planning, system operation and market integration. New ideas and needs will be contrasted against experience – in particular from the Nordic countries:

- Transmission possibilities based on HVDC in general and with new HVDC technology in particular;
- Impacts of HVDC and its economics on short and long term system planning;
- Impacts on AC system operation from HVDC schemes including interaction, control and coordination of AC and DC systems;
- Interference between AC and DC-lines and with other HV equipment in close proximity;
- Management of renewable energy sources (RES), in particular integration with HVDC;
- Impact on the protection of AC networks with large scale HVDC systems; i.e. Special Protection Schemes;
- Market design and operation considerations in systems with significant HVDC.

PARTICIPANTS

The Symposium is aimed at transmission, distribution and generation asset owners, system operators, suppliers, designers, traders, regulators, research laboratories and universities.

PROGRAMME

Monday and Tuesday 25-26th May 2015
Study Committee and Working Group Meetings

Wednesday and Thursday 27-28th May 2015
Symposium:

- Panel Sessions with invited speakers that will discuss current developments and achievements concerning HVDC Systems, the market integration of HVDC as well as the changing operational challenges.
- Paper sessions during which authors present their work and then participate in general discussions.
- Presentations of pilot projects with real cases give delegates presented by industry experts.

Friday 29th May 2015
Technical Tour

MAIN SYMPOSIUM TOPICS

Aspects of HVDC scheme applications and operation as it relates to the following major themes:

1. HVDC and Power Electronic technology and developments
2. System Development and Economics
3. Hybrid AC-DC Systems - Operation and Control
4. Electricity Markets and Regulation
5. System Technical Performance

LANGUAGES

The papers must be written in English.

DEADLINES

Authors are kindly requested to take note of the following deadlines:

Receipt of abstracts: **30th September 2014**
Notification of acceptance: **30th November 2014**
Receipt of full papers: **28th February 2015**

ORGANISATION

Technical Committee

Chaired by:
Joachim Vanzetta SC C2

Mohamed Rashwan SC B4
Konstantin Staschus SC C1
Joachim Vanzetta SC C2
Pouyan Pourbeik SC C4
Andrew Ott SC C5
Philippe Adam CIGRE Secretary General

Local Organising Committee

Lund University and Technical University of Denmark
Chaired by Sven Jansson

PUBLICATION OF SYMPOSIUM PAPERS

The papers will be available for downloading from the CIGRE Website before the Symposium for all registered participants.

The papers will also be available for purchase on electronic format from the CIGRE Central Office, after the Symposium.

A report on the Symposium will be drafted after the Symposium and published in ELECTRA and posted on the CIGRE website.

REGISTRATIONS

The General Programme of the Symposium will be issued in December 2014, with all the relevant information: technical programme, registrations, and accommodation options.

Further Symposium information can be found at <http://cigre.org/Events/Symposia/Symposia-2015/Lund-Symposium>

Contacts

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Please note that the Study Committee meetings are by invitation only. Participants who are not Study Committee members who desire to participate in Study Committee meetings should discuss this with their National Committee executive.

SUBMISSION OF SYNOPSES

Participants wishing to present papers are invited to submit their abstract in **ENGLISH**
(500 words)

to the Central Office of CIGRE before

30th September 2014

Email address: sylvie.bourneuf@cigre.org

Each abstract must indicate the topic(s) that will be addressed. The name, title, company affiliation, e-mail and full address of the author(s) should also be given.

A template is available on the symposium page of the website

