

May Newsletter



We now have a new logo and updates to the website.

Have you used your NGN benefits yet:

- **Inform:** Access the information in E-CIGRE and at the next NGN event
- **Engage:** Do you want to contribute to CIGRE and get involved?
- **Network:** Start building your professional network today
- **Develop:** Participate in our Mentoring program and improve your skills in a working group

Find out more at www.cigre-ngn-uk.org or email us at communications@cigre-ngn-uk.org

Upcoming Core Technical Event

Title: Pumped Hydro Storage
 Date: TBC
 Location: Cruachan, Scottish Power

Title: HV Testing and Standards
 Date: November, 2010
 Location: Manchester, University of Manchester

Upcoming Short Technical Events

Title: Tidal power
 Forensic analysis
 Composite cross arm
 Date: TBC

Will you participate in the next event? Don't forget to register on CIGRE web-site

Most recent event - Offshore Windfarm Development

Date: 29 April 2010
 Attendees: 30 NGN CIGRE members
 Location: Siemens T&D, Monkton, New Castle upon Tyne
 Summary:

The NGN members' interest for the technical event on "Offshore Windfarm Development" is an example of their commitment to a more sustainable energy future. On the 29 April, around 30 NGN members from across the country gathered at Siemens in Newcastle for an event chaired by Sarah Follmann, NGN's secretary and treasurer. Nick Jenkins from Cardiff University set the tone of the day by giving a very **informative** talk on recent and planned wind development in the UK. He recons: "the area is developing so fast that you may know better than me..." – this provided an excellent opportunity to **engage** the audience into a lively discussion. John Finn from Siemens then reported on the current work of Cigré Working Group B3.26, dealing with AC substations for offshore substations. His presentation made it quite clear that a lot of motivation is needed for a WG to successfully deliver significant contribution to very complex topic areas within a relatively short period!



During lunchtime, everyone got a chance to catch up with old acquaintances or establish new **connections**. Straight after lunch, the organiser had a hard time to get everybody on the coach to the nearby McNulty marine construction yard. There, we had the opportunity to visit the Galloper platform, less than 10 days prior to its shipping date and to discuss aspects related to the mechanical platform design with McNulty representatives. Back in the conference room, Jonathan Horne from National Grid reminds us that putting turbines and substations into the sea is one thing – operating a grid with huge amounts of remote and uncontrollable power is another challenge! Finally, Rodney Jones from Siemens Windpower gives us an overview into the capabilities of modern wind turbine power electronic converters: besides converting power into power, these amazing things can do quite a bit more...

Feedback: "It was fascinating to experience an offshore platform from the inside. Overall this event has helped me to develop my understanding of what could be the future of the electricity system", says Eswar Chikaluri, an NGN member from AREVA T&D.

Many thanks to speakers, organisers and participants! More information about this event will be shortly available on NGN website.



Do you have an idea for the next event or you want to host an event?
Please let us know at eventideas@cigre-ngn-uk.org

CIGRÉ 2010 SESSION

Paris 2010

Date: 22-27 August 2010

Location: Palais de Congres, Paris France

Recent developments:

- NGN will have a stand at the exhibition hall to showcase our work and interact with the visitors.
- The papers from there NGN UK members have been accepted at this year's session:
 - Chris Dent, University of Durham
 - Patrick Favre-Perrod, Areva T&D
 - Ryan Tumilty, KEMA
- Talk by NGN Chair Beatrice Chong in Electric Power Engineering Education (EPEE) is confirmed
- Paris networking event (We thank Ryan Tumilty for his contribution in organisation of this event)
- Paris technical event is confirmed (We thank Julija Matevosyan for her contribution in organisation of this event)

CIGRE conference on EMF and ELF

Date: January 2011

If you working with or studying EMF or ELM you can take a part in the 2nd International ELF/EMF Conference in Paris by submitting your papers. Find out more in the attached brochure.



CIGRE conference on Insulated Cables

Date: June 2011

If you working with or studying Insulated Cables you can take a part in the 8th International Conference on Insulated Cables in Paris by submitting your papers. Find out more in the attached brochure.

Next Steering Committee Meeting

Date: 28 June 2010

Location: ABB Ltd, Stone, Staffordshire

Let us know your feedback or if you have any queries, please contact us at communications@cigre-ngn-uk.org

You can chat with us on [facebook](#)

<http://www.facebook.com/p.php?i=36910551&k=XYL4Y2RZ665G6BE1Y1W4VPURYTAD235MPPE&r>

Yours truly,

Elena Petrova and CIGRE NGN UK Team
May 2010



CALL FOR PAPERS

2nd International Conference on EMF-ELF PARIS, MARCH 24th & 25th, 2011

DEADLINE

Submission of abstracts: **15 July, 2010**

Submission of texts: 15 January, 2011





EMF-ELF-2011

CALL FOR PAPERS

2nd International Conference on Extremely Low Frequency Electric and Magnetic Fields

PARIS, FRANCE 24 - 25 MARCH, 2011

DEADLINE

Submission of abstracts: 15 July, 2010

Submission of texts: 15 January, 2011

Organised by:

- CIGRE French National Committee
- S.E.E. Société de l'Électricité, de l'Électronique et des TIC

Organization Committee:

Bernard DALLE	CIGRE SCB2 and SEE-SE (France)	Chairman
Jean KOWAL	CIGRE	
Philippe ADAM	CNF-CIGRE	
Nicolas BEAUDE	SEE (France)	

Scientific and Technical Committee:

Hervé LAFFAYE	SEE – Chairman of the Scientific and Technical Committee, France	Chairman
Bernard DALLE	CIGRE SCB2 and SEE-SE, France	Co Chairman & Secretary
Jean HOEFFELMAN	CIGRE SCC4, Belgium	Co-Chairman
Pierre ARGAUT	CIGRE SCB1 CIGRE, Silec Cable, France	
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Laetitia PASSOT	RTE, France	
Michel PLANTE	HQ, Canada	
Ener SALINAS	Centre for Physical Electronics and Materials (PEM), England	
Meludin VELEDAR	CIGRE SCC4, Bosnia Herzegovina	



Objectives:

What is EMF-ELF-2011?

EMF-ELF'11 is intended to be an international forum for the exchange of information in the fields of research, measurement, computation and modelling, mitigation relating to electric and magnetic fields coming from AC or DC overhead lines, AC or DC underground cables or submarine cables, AC or DC substations and converting stations.

Why is EMF-ELF-2011 important?

Despite the publication of hundreds of studies over the last 3 decades, EMF effects continue to be a controversial issue. It involves a number of different and connected aspects related to technology, medicine, biology, and also economy, sociology, psychology, communication, and ethics. Besides the crucial dilemma of whether extremely low frequency electric and magnetic fields are really a health risk other questions were raised such as: Why is the public perception so different from the evaluation of scientists? How can knowledge and information including exposure standards rationale be improved? What can we do to reduce exposure? To what extent are precaution measures justified?

EMF-ELF-2011 will allow in-depth analysis of the state-of-the-art : solutions are needed to disseminate scientific information, to improve technical measures to reduce exposure when necessary, to implement in practice the exposure standards (including the recent European Directive), and to establish an effective dialogue between all stakeholders.

Who will be taking part in EMF-ELF-2011?

As in the past EMF-ELF conference held in 2009, *EMF-ELF-2011* should prove very useful to health professionals, researchers, engineers, decision-makers, utilities, manufacturers, installers and users.

The following topics will be discussed:

1. AC and DC Electric and Magnetic fields and induced currents generated by overhead lines, underground cables, submarine cables, substations and DC converters

- The characterization, the calculation and the measurement of ELF/EMF for AC and DC installations
- Induced currents and contact currents : characterization, calculations, measurement, steady state versus transients
- Regular ion, corona, interference from harmonics, ground currents form dc systems, sea electrodes, ions concentrations and current densities under DC lines ...
- Impact of influencing parameters, ...

2. Mitigation techniques for EMF & contact (induced) currents

- AC, DC cables
- AC, DC Overhead lines
- Substations
- Live work

3. Biological effects of AC and DC installations

- Occupational and public exposure to electric and magnetic fields and related contact currents
- Exposure assessment : computer modelling/calculation of internally induced current densities and fields
- Innovative methods for calculating exposition for epidemiologic studies
- Results of Medical Studies : DC fields ; AC fields; Air ions
- Medical implants and exposure to EMF-ELF
- Effects on animals (grazing stock...)

4. Evolution of international Standards, guidelines and requirements

- Standards and experience with their application in practice
- Guidelines and experience with their application in practice
- Impact of the European Directive on work in substations and on OHL, including live work
- Management of Professional exposition taking into account the new Standards and Directive
- Are precautionary measures justified?
-

5. Risk, knowledge and information management

- Public information
- Media information
- Public authorities information
- Law officers information
- Innovative solutions for information : EMF meters,...
- Risk management and communication
- Experimental farms
- ...

Nota : As electric and magnetic fields have already been covered in SARAJEVO, mainly innovative reports will be selected for this colloquium.

Official Languages:

The official languages at *EMF-ELF-2011* will be **French** and **English**. Simultaneous translation will be provided in both languages.

Abstracts:

*All abstracts for proposed papers should be sent to papers@emf-elf.org in **English**, by email (as an attachment in .doc format (97 or 2003) as well as in paper form by the deadline **15 July, 2010**.*

*The abstract should be adequately detailed and present a synopsis of the paper (in 500 words maximum, one single page as far as possible) **emphasising any new ideas**, with title, author's names, their affiliations and emails.*

It is recommended to use the template available on the site www.emf-elf.org

A booklet containing all the abstracts of papers accepted for presentation will be issued to all conference delegates registered in advance.



Full Papers:

Authors whose papers have been accepted will be informed by 15 October, 2010.

Full texts in **English** should reach papers@emf-elf.org by **15 January, 2011.**

The conference programme will be finalized by 30th October, 2010.

Proceedings : The papers will be published. A CD will be handed to all registered participants. A report on the colloquium will be drafted by the technical Committee. It will be published in Electra and on the CIGRE SC websites.

Registration:

Registration fees will be specified at a later date. These will include attendance to the conference and a copy of the abstracts and proceedings.

Please note that authors of papers to be presented are not exempt from registration fees.

Administration:

EMF-ELF-2011 Secretariat

Société de l'Électricité, de l'Électronique & des TIC

Tel: +33 (0)1 56 90 37 02

Fax: +33 (0)1 56 90 37 08

Email: infos@emf-elf.org

17 rue Hamelin

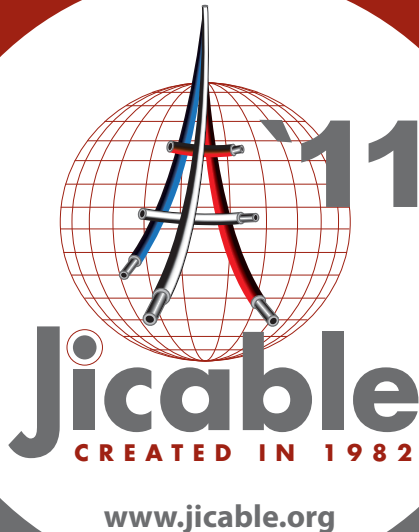
75783 PARIS Cedex 16

FRANCE

Conference Venue:

EMF-ELF-2011 will be held in PARIS

SEE YOU IN PARIS !



CALL FOR PAPERS

8th International Conference on Insulated Power Cables

PARIS - VERSAILLES - FRANCE
19 - 23 JUNE, 2011



DEADLINES FOR YOUR AGENDAS

🕒 Submission of abstracts: 15 November, 2010 🕒 Full texts: 15 April 2011

🕒 Honorary Committee

- Ken BARBER, *Olex, Chairman of Jicable'07 ISTC (International Scientific and Technical Committee), Australia*
- Horst BLECHSCHMIDT, *Chairman of Jicable'95 ISTC, Germany **
- Claude BOVIS, *Chairman of Jicable'84 Steering Committee, France **
- Robert-Pierre FAUDEL, *Chairman of Jicable'87 & Jicable'91 Steering Committee, France*
- Zensuke IWATA, *Chairman of Jicable'03 ISTC, Nuclear Fuel Industries, Ltd, Japan*
- Roland NATALINI, *Chairman of Jicable'99 Steering Committee, France **
- Robert ROSEVEAR, *Chairman of Jicable'99 ISTC, Southampton Dielectrics Consultants Ltd, United Kingdom*
- Ralph SAMM, *Chairman of Jicable'91 ISTC, USA*
- Pierre-Henri SEDES, *Chairman of Jicable'95 Steering Committee, France **
- Roger TELLIER, *Chairman of Jicable'84 & Jicable'87 ISTC, France*
- Bruno THOMAS, *Chairman of Jicable'03 Steering Committee, France*

🕒 Organized by

- SEE, *Société de l'Électricité, de l'Électronique et des Technologies de l'Information et de la Communication*
- CIGRÉ, *Council on Large Electric Systems*
- Électricité Réseau Distribution France (ERDF)
- Réseau de Transport d'Électricité (RTE)
- Syndicat Professionnel des Fabricants de Fils et Câbles Électriques et de Communication (SYCABEL)
- Syndicat des Entreprises de Génie Électrique (SERCE)

🕒 Sponsored by

- International Conference on Electricity Distribution (CIRED)
- International Electrotechnical Commission (IEC)*
- European Committee for Electrotechnical Standardization (CENELEC)*
- IEEE Dielectrics and Electrical Insulation Society *
- IEEE Insulated Conductors Committee *
- IEEE French Section *
- The Union of the Electricity Industry (EURELECTRIC)*
- The European Confederation of National Associations of Manufacturers of Insulated Wire and Cable (EUROPACABLE) *
- Association of the Electricity Supply Industry of East Asia and the Western Pacific (AESIEAP) *

🕒 Objectives

■ What is JICABLE'11?

JICABLE'11 is an international forum for the exchange of information in the fields of research, industrial development, installation, operation and diagnoses relating to insulated power cables and their accessories from low voltage and special cables up to ultra high voltage cables and new technology cables.

■ Why is JICABLE'11 important?

Insulated power cables are increasingly used in electric power transmission and distribution networks. This is due to the significant progress achieved in the development of new technologies with higher performances, and motivated by increasing environmental pressure. Cables are recognised as a reliable means for the transmission and distribution of electrical energy.

- Union of Producers, Conveyors and Distributors of Electric Power in Africa (UPDEA)
- Head of ASEAN Power Utilities / Authorities (HAPUA) *
- Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE) *
- Edison Electric Institute, USA *
- Federation of Electrical Power Companies, Japan (FEPC) *
- Electric Power Council of the Commonwealth of Independent States, Russia*
- Verband der Elektrotechnik Elektronik Informationstechnik e.V. / Deutscher Elektrotechniker (VDE)*
- Electrosuisse*
- Österreichischer Verband für Elektrotechnik (ÖVE) *
- The Institution of Engineering and Technology (IET) *
- Société Royale Belge des Electriciens (SRBE)*
- Federazione Italiana di Elettrotecnica, Elettronica, Automazione, Informatica e Telecomunicazioni (AEIT) *
- European Network of Transmission Systems Operators for Electricity (ENTSO-E) *
- European Regulators Group for Electricity and Gas (ERGEG) *
- Union Française de l'Électricité (UFE)
- Union Technique de l'Électricité (UTE)*
- Prospective 2100, France

* (to be confirmed)

🕒 Committees

- Steering Committee - Chairman: Laurent TARDIF, SYCABEL, Prysmian, France
- Organization Committee
Chairman: Lucien DESCHAMPS, Prospective 2100, France
Secretary: Bernard DALLE, RTE, France
- International Scientific and Technical Committee
Chairman: Ray AWAD, Hydro Québec TransÉnergie, Canada
Secretary: Jean BECKER, Nexans – SART Consult, Belgium
Vice-Chairmen: Pierre ARGAUT, CIGRÉ, Silec Cable, France
Kenneth Willis BARBER, Olex Australia PTY Ltd, Australia
Marcello Del BRENNA, Prysmian, Italia
Paul PENSERINI, RTE, France
Susumu SAKUMA, Viscas, Japan
Mozart de SIQUEIRA CAMPOS ARAÚJO, Brennd Energia, Brazil
John SMITH, General Cable Corporation, USA

JICABLE'11 will allow in-depth analysis of the State-of-the-Art and future perspectives: new materials, evolution in technologies, manufacturing process, maintenance policies and condition assessment, upgrading, refurbishment, lessons learnt from service, dielectric phenomena, thermal and thermo-mechanical behaviour, ... new innovative technical solutions for high power transmission: new superconductive materials as well as a closer look at major submarine cable projects connecting High Voltage networks in many countries.

■ Who will be taking part in JICABLE'11 ?

As for the 7 earlier JICABLE conferences held between 1984 and 2007 (581 delegates from 48 countries), JICABLE'11 will prove very useful to the following segments of the cable industry: researchers, engineers, decision-makers, raw materials suppliers, manufacturers, consultants, installers and users.

☉ The following topics will be discussed

1. LV and MV cable systems

- LV and MV cables and accessories (insulated underground and overhead networks)
- New materials, environmentally concerned conception,
- Developments in manufacturing processes and techniques
- Laying methods, experience in service and quality assurance, comparative performances of cables buried with and without mechanical protection
- Operating conditions, thermo-mechanical behaviour, reliability, failure analysis, operating life extension
- Use of telecommunication cables in conjunction with LV and MV cable circuits, powerline communications
- Safety in case of fire
- Standardization

2. HV and EHV cable systems

- HV and EHV AC cables and accessories
- HV and EHV DC cables and accessories
- New developments
- Forced cooling, water cooling, ...
- New materials, environmentally oriented design
- Developments in manufacturing processes and techniques
- Laying methods, technical specifications, shared installation structures, quality assurance, prevention of third party damage, new innovative laying methods implying shorter duration of the work and lesser disturbance for nearby residents
- Operating conditions, maintenance, service experience, reliability, failure analysis operating life extension, improving performances and operating at design limits, upgrading and updating
- Technical and economical optimisation (high stresses, taking into account reliability, availability, temperature in normal, overload and short-circuit conditions, etc.)

- Integration in networks
- Use of telecommunications cables in conjunction with HV and EHV links, powerline communications
- Safety in case of fire
- Standardization

3. Submarine cables

- AC and DC cables systems
- Technical and economical optimization for the different parts of the installation
- Cables systems for offshore wind power plants and oil platforms
- DC cables and accessories
- Laying, embedding and protection techniques
- Operating conditions, feedback
- Integration in the network

4. Economy and costs of cable systems

- Global cost and ownership cost
- Cost reduction and optimisation of cable systems
- Reducing the number of joints: cost of reliability, maintenance, ...
- Different costs of investment (civil works, cable, laying, joints, ...)
- Losses in operation
- Cable systems and smart grids
- Shared installation structures : multipurpose, ...

5. Ageing, diagnosis, maintenance, remaining life estimation and management

- Methods for assessing the properties and characteristics of materials and possible impact on the performances of cables and accessories
- Ageing laws : methods, experimentation, validity
- Monitoring
- On-line diagnosis of materials and tests for fault location
- Methods of examination
- Expert systems
- Remaining life estimation
- Life extension

6. Cables for the future

- Gas-insulated cables (SF6 and other gases)
 - Technologies under development
 - EHV / UHV cables
 - Long-distance use
 - Laying and civil engineering
 - Repair methods
- Superconducting links
 - Feedback from the first High Temperature Superconducting links (HTSC)
 - Prospects for new High Temperature Superconductors (HTSC)
 - Low-temperature properties of insulating materials
 - Technico-economical evaluation
 - Questions related to the integration of superconducting links in standard networks
- Other new underground power transmission systems
- Prospects of nanotechnologies : nanotubes, nano-filled polymers, ...

7. Technical challenges encountered with cable systems

- Integration of long cables (high power) in networks (compensation, static stability and dynamics of networks, distribution of the power flows in the mixed networks),
- Generation output with cable systems: compensation, no load voltage,
- Long length lines for bulk power transmission (tens of km to hundred km), how to ensure reliability and operability,

8. Industrial and special cables

- Technologies and installation (eg. land, underwater, overhead and spatial cables; wind power plants, PV photovoltaic / solar energy cables, nuclear power plants, etc.)
- Substation cables, generation station cables, LV secondary cables (AC and DC cables)

- Cables with improved fire resistant characteristics
- Cables submitted to high mechanical stresses
- New materials
- Developing manufacturing techniques

9. Cables, environment and sustainable development

- Impact of cables on the environment (aerial / overhead, underground, submarine)
- Magnetic field mitigation and health concerns
- Environment friendly design
- Impact of the environment on cable systems (tropical, etc.)
- Corrosion
- Derating in metallic structures
- Specific technologies
- Lifecycle analysis
- End-of-life treatment methods
- Developments in cable regulations
- Coexistence of cables and nearby systems (eg. telecommunications)

10. Design

- Electrical, thermal and thermo-mechanical design
- Steady state and dynamic conditions
- Ampacities
- Sheath bonding, Grounding and protection
- Cable characteristics and cable modelling
- Associated computer codes; validation
- Voltage and current system coordination
- Issues related to Cable integration in networks

11. Testing methods

- Definitions
- Selection criteria
- Validity
- Development tests, evaluation, prequalification tests, type tests, acceptance and after laying tests
- Low frequency testing
- PD testing as maintenance tool

☉ Official Languages

The official languages at **JICABLE'11** will be **English and French**. Simultaneous translation will be provided in both languages.

☉ Abstracts

All abstracts for proposed papers should be submitted online according to the instructions and the template available on the jicable site www.jicable.org by the deadline: **15 November, 2010**.

The abstract in **English** should be adequately detailed and present a synopsis of the paper (in 500 words maximum, one single page as far as possible) emphasising any new ideas, with title, author's names, their affiliations and emails.

A booklet containing all the abstracts of papers accepted for presentation will be forwarded to all conference delegates registered in advance.

☉ Full Papers

Authors whose papers will have been accepted will be informed by the end of December, 2010. Full texts in **English** should reach the **JICABLE'11** Secretariat by 15 April, 2011. The conference programme will be finalized by 15 January, 2011.

☉ Technical Exhibition and Technical Visits

An international technical exhibition will be organised during the conference from Monday June 20th to Wednesday June 22nd 2011 at the Conference site. Information concerning this exhibition is already available from the **JICABLE'11** Secretariat.

Technical visits will be organized for the participants during the Conference in the Paris region on Thursday June 23rd 2011.

☉ Registration

Registration fees will be specified at a later date. These fees will include attendance at the conference and a copy of the abstracts and proceedings. **Please note that authors of papers to be presented are not exempted from registration fees**, and at least one author of each paper must be registered, failing which the relevant paper will be withdrawn.

☉ Conference Venue

JICABLE'11 will be held at the Palais des Congrès in Versailles.

SEE YOU IN PARIS-VERSAILLES!

You are requested to complete and return this form as soon as possible to the following address:

JICABLE'11 - SEE
17 rue Hamelin
75783 PARIS CEDEX 16
FRANCE

Tel: + 33 (0)1 56 90 37 02

Fax: + 33 (0)1 56 90 37 08

Email : jicable@see.asso.fr



I am interested in attending the JICABLE'11 Conference

- Please send me further information: YES NO
- I wish to exhibit (technical exhibition): YES NO
- I wish to present a paper: YES NO

■ on the following topic No:

■ Provisional title:

■ Family name: ■ First name:

■ Address (Company/Organization):

■ No: ■ Street:

■ Postal code & city:

■ Country:

■ Tel.: ■ Fax:

■ Email: