

AGP 21 TGEG 18 05 Program

Association Grand Projects

Workshop TGEG'18

Technologies for Global Energy Grid

Organization: Association Grand Projects'21- AGP'21 President: Lucien Deschamps With Technical and Scientific support of:







CIGRE, International Council on Large Electric Systems, Jicable, International Conference on Insulated Power Cables SEE, Society of Electricity, Electronics and Information Technologies and Communication

Wednesday, 29 August 2018 - 9:00 am to 5:00 pm

Palais des congrès de Paris, Room 341 2 place de la Porte Maillot, 75 017 Paris

Program

André Merlin : Chairman Workshop TGEG'18 Gerald Sanchis : Workshop Coordination L: Lecture SI: Short Intervention

8:45 Welcoming participants 9:00 Opening Ceremony André Merlin, Past President CIGRE, Former Founding President RTE, AGP'21

Session 1 : Global electricity network feasibility
9:15 – 10: 45
Chairman: André Merlin, Past President CIGRE, Former Founding President RTE, AGP'21
Rapporteur: Gerald Sanchis, RTE, Convener CIGRE, WG C1.35, France.
1.1 L: Global electricity network feasibility study, Presentation of the results of the CIGRE C1.35
working group.
by Gerald Sanchis, RTE, Convener WG C1.35
1.2 SI: HVDC Technology key issues for energy grids
by Marcio Szechtman, CEPEL – Brazilian Power Research Centre, Brazil
1.3 SI: European Supergrid, 2030 - 2050,
by Spyros Chatzivasileiadis, DTU, University Technical of Denmark, Denmark
1.4 SI: Multinational power system interconnection from INGA (DRC),
by Beleke Tabu Leonard, Betec Sarl, RD Congo (Communication sent by email)

1.5 SI: Sahara Wind-HVDC project's integrated access to the North Atlantic trade winds, by Khalid Benhamou, Sahara Wind, Morocco,

1.6 SI: The Mediterranean Master Plan, Consolidating a Secure and Sustainable Electricity Infrastructure in the Mediterranean Region, Angelo Ferrante, Med-TSO, Carlo Sabelli, TERNA, Emmauel Bué, RTE, Mihai Paun, Med.-TSO, CIGRE, Study Committee C1: Power system development and economics. by Antonio Iliceto, TERNA, Italy

Coffee break from 10:45 to 11:00

Session 2. Keynote 11:00 – 11:30 Chairman: Jean Kowal, ex Medgrid and CIGRE. France



Rapporteur : Petru Notingher, Université de Montpellier 2, CNRS, France **2.1 L: Technologies for the Global Energy Grid**. by Mingli Fu, Electric Power Research Institute of China Southern Power Grid, China

Session 3: Insulated Power Cables

11:30 – 12:45
Chairman: Ray Awad, Independent Consultant, Canada
Rapporteur: Gilbert Teyssedre, Laplace, Université Paul Sabatier, Toulouse, France
3.1 L: Superconducting cables: status and drivers for market penetration
by Jean-Maxime Saugrain, Nexans, Machines, Cryogenics & Superconductors VP
3.2 L: State of the art and new technologies AC & DC of insulated cable systems, and
submarine cables,
by Prysmian, Stefano Cotugno, Prysmian PPL, Italy
3.3 SI : Superconducting Cables for very high Power Transmission.
by Christian-Eric Bruzek, Nexans, France

3.4 SI : Superconducting transmission lines

by Timofey Rjabin, R&D Center FGC UES, Russia

Lunch break from 12:45 to 13:45 taken on site.

Session 4: Overhead power lines 13:45 – 14:30 Chairman : Jose Henrique Machado Fernandes, Independent Consultant, Brazil Rapporteur: Bernard Dalle, BMD - Consulting, France 4.1 L: A situation of the state of the art and the innovations of the overhead electric power lines, in Brazil. by Carlos Alexandre M. do Nascimento, CEMIG, Brazil

Session 5. Advanced technologies, innovation

14:30 – 15:15
Chairman: Timofey Rjabin, R&D Center FGC UES, Russia
Rapporteur : Olivier Boisard, Olivier Boisard Conseil, Ecole Centrale Lille, France
5.1 L: Factors for Investment decision GIL-Cable, Conclusion report on CIGRE TB 639
by Hermann Koch, Siemens, Erlangen, Germany
5.2 SI: Superconductivity cables associated with Liquid H₂,
by Christian-Erik Bruzek, Nexans, France

Coffee break from 15:15 to 15:30

Session 6. Storage
15:30 – 16:15
Chairman: Khalid Benhamou, Managing Director, Sahara Wind, Morocco.
Rapporteur : Pierre Denuelle, Feedering, France
6.1 L: A Survey of Energy Storage Technologies
by Robert B. Tanner, Nature and People First LLC, USA
6.2 SI: ESS – Energy Storage System
by Danny Junghyun Kim, Hyosung Corporation, Korea

Session 7. Financial and Regulatory Aspects 16:15 – 17:00 Chairman: Beleke Tabu Leonard, BETEC sarl, RD Congo Rapporteur: Jacques Horvilleur, SEE, France 7.1 L: Operate / Finance World Energy Grid By Jean Kowal, ex Medgrid and CIGRE. France

17:00 – Closing of the Workshop by André Merlin, Chairman, Workshop TGEG'18