28th FEB. **2022**



empowering
networking
globalknow-how

CORONA: "a luminous, audible discharge brought on by the ionization of a fluid such as air surrounding a conductor that is electrically charged".







A MONTHLY NEWS-SHEET TO PROVIDE INFORMATION AND UPDATES TO CIGRE MEMBERS

TECH TALK

A series of links to CIGRE Technical documents



DIELECTRIC PERFORMANCE OF INSULATING LIQUIDS FOR TRANSFORMERS - TB856

Dielectric liquids, in combination with solids, have been used for insulating power transformers for more than a century. While mineral oils have dominated the market, new liquids with different molecular structures are now in common use.

This brochure addresses the dielectric performance of the liquids as used in a transformer - including the potential influence of solid insulation on the behaviour of prebreak down streamers in the liquid. Topics discussed include how the chemical composition of liquids influences the streamer velocities and breakdown, and how the electric field configuration may govern breakdown modes.

The aim of this brochure is to review the dielectric requirements and test standards of dielectric liquids as seen from a transformer designer, to review the behaviour of dielectric liquids under various electric stresses, and finally, to identify knowledge gaps.

NGN NEWS

News from our Young Engineer Group (U 35yo)

The NGN has had a busy start to 2022, with the joint webinar event 'Cutting edge technologies towards a net-zero world' with NGN UK taking place on January 27th.

The event had James Guest from AEMO speaking on wide-area EMT modelling and Roisin Hickey from Cenex speaking on EV charging. The event was a huge success with over ninety registrations. And if you missed it, the event recording is now available on the CIGRE YouTube channel, where other past NGN webinars are also posted.

https://www.youtube.com/watch?v=XqYaS_JNPRo



RECOMMENDATIONS FOR TESTING DC LAPPED CABLE SYSTEMS FOR POWER TRANSMISSION AT A RATED VOLTAGE UP TO AND INCLUDING 800 KV - TB853

This article summarizes the work performed by CIGRE WG B1.66 (Recommendations for testing DC lapped cable systems for power transmission at rated voltages up to and including 800kV).

The Working Group was established in 2018 to update the existing recommendations for testing of HVDC cable systems with lapped insulation systems and issue the updated recommendations in a Technical Brochure.

The updated test recommendations reflect the requirements for lapped cable systems operating in HVDC systems with line commutated converters and voltage source converters.

WEBINARS - FREE



MAINTENANCE OF HV CABLE SYSTEMS - WBN037

The webinar aims to give introduction to the Technical Brochure of Maintenance of HV cable systems. Maintenance of high voltage (HV) cable systems, and accessories, is an important practice to ensure the availability of a cable system during service.



ITW is a global day celebrating the social, economic, cultural and political achievements of women. The day also marks a call to action for accelerating women's equality. IWD has occurred for well over a century with the first IWD gathering in 1911 supported by over a million people.









ELECTRA MAGAZINE **FEBRUARY 2022 EDITION**

Editorial

Session 2022

The 2022 Session. back to face-to-face.



Global Connections

- · Low-carbon hydrogen: for what uses?
- BEHYOND Project: Innovative Modular Solution for Hydrogen Production from Offshore Wind
- Challenges of Power System Operations in Colombia

Technology E2E

- Onsite Demonstration and Prospects KEPCO's Advanced Distribution Management System
- · Resilience considerations with increased Distributed Energy Resource (DER) integration
- Documentation and version handling related to Protection, Automation and Control functions

Life of Association

- CIGRE Science & Engineering (CSE) The technical magazine of choice
- Increasing women participation in the energy sector - A perspective from the CIGRE Brazilian Women in Energy
- Second year of the New Zealand A2 power transformers and reactors panel
- CIGRE Southern Africa held its 10th Conference online
- In Memoriam Professor Akihiro Ametani

Annual Reports

- SC A1 > Rotating Electrical Machines
- SC A2 > Power transformers and reactors
- SC A3 > Transmission and distribution equipment

Working Group Report

WG C4.47 - Resilience of interdependent critical infrastructure

+ Technical Brochures



10TH & 11TH MAY, 2022 ADELAIDE, SOUTH AUSTRALIA

GET THE TECHNICAL SOLUTIONS YOU NEED

CIDER is the ideal forum to get the know-how you need in this rapidly emerging space. If you want better knowledge of how DER will work in our existing and future electricity networks get along to CIDER, the hottest topic facing the industry!

QUALITY PRESENTATIONS including KEYNOTE SPEAKERS

Brendon Hampton, Manager Network Strategy, SA Power Networks: South Australia - The Heart of the Distributed Energy Future.

Bruce Bennett, Manager Connection and Access, AGL: ESCRI/Dalrymple grid-forming battery.

CIDER facilitates practical conversations and information sharing between technical experts.

More information and to register **CLICK HERE**

SPONSORS:

Platinum Sponsor

Gold Sponsor

Silver Sponsor







Silver Sponsor

Silver Sponsor

Silver Sponsor









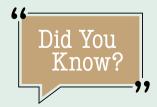
Australian Technical Panel Presentations:

These can now be found on our **YouTube** channel and summarise the work being carried out in each of our 16 Technical fields of work.

e-cigre: The go to site for all CIGRE documentation and Technical Brochures.

Through e-cigre you can search the vast technical database of 14,000 + items, order Green books or view a range of Webinars and search for past Electra editions.

https://e-cigre.org/



Follow us to keep up-to-date:

- Linkedin
- **Twitter**
- YouTube

Social Media: CIGRE Australia has several social media channels where we post updates and items of interest.





