

Corona Times

8th MAY 2020
EDITION 2



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 FORTNIGHTLY NEWS-SHEET TO PROVIDE INFORMATION AND UPDATES TO CIGRE MEMBERS

TECH TALK

A series of links to CIGRE Technical documents



Network protection performance audits

The scope of the working group was to cover the possibilities, advantages and requirements for utilising proprietary power system and protection analysis software for undertaking protection performance audits of transmission and distribution systems involving hundreds or thousands of protection devices.



Field grading in electrical insulation systems

The purpose of the presented Technical Brochure is to introduce the theoretical concepts as well as the various practical implementations of electric field grading, which is a basic and essential measure of field control in many apparatuses of the electric power transmission and distribution system. Examples are cables and their accessories, plug-in-systems (connectors), bushings, rotating electrical machines, transformers or gas insulated systems.

CIGRE CASE STUDIES

The Market operator AEMO has used CIGRE contacts and information to engage with other experts to further broaden AEMO's expertise and understanding and to leverage the knowledge of a larger pool of experts internationally to assist in addressing some of the highly relevant challenges Australia is currently facing. An example is AEMOS involvement in WG B4.62 which discusses methodologies for assessing connection of wind farms to weak ac networks, and raising international awareness on issues associated with lack of system strength.

KIWI COMMENTS

News from across the ditch

The inaugural Annual NZ B1 technical panel session is scheduled for Monday 11 May. CIGRE NZ will be hosting a series of webTutes, with the tutorial presentations coming from members of both AU B1, and NZ B1. The KMS will be used as the working repository for AU-NZ B1 members joint publications.

WEBINAR - FREE



Responsible management of the EMF Issue

EMF research remains active and EMF continues to present major issues for some businesses. Since the WHO 2007 review, there have been over 1200 peer reviewed studies regarding EMF and possible health effects.

NGN CORNER

News from our Young Engineer Group (U 35yo)

We are kicking off with our second webinar for the 2020 calendar year! This will be presented by our previous B4 panel convenor Les Brand, who will be presenting on an Introduction to VSC HVDC. With a new webinar interface we are hoping to beat our old record of 100 webinar attendees (new platform can manage 250).

Please find details here: [REGISTER YOUR INTEREST.](#)

BREAKING NEWS Aussies recognised with CIGRE Distinguished Member Awards

Four long serving Australian CIGRE members have been recognised by the CIGRE global community and awarded the title of CIGRE Distinguished Member.

The Distinguished member title is granted to long-standing members who have contributed significantly to CIGRE through participation in the technical work or within the National Committees. The recipients **Ken Ash, Alex Baitch, Rod Hughes and Simon Bartlett** were nominated by the Australian National Committee and their efforts and contributions recognised and endorsed by the global Technical Council. Congratulations gentlemen!

MOTHER'S DAY - 10TH MAY

AN AUSTRALIAN, JANET HEYDEN, IS CREDITED WITH HAVING STARTED THE TRADITION OF GIVING GIFTS ON MOTHER'S DAY. JANET WAS A RESIDENT OF LEICHHARDT SYDNEY, AND STARTED A CAMPAIGN IN 1924 TO COLLECT GIFTS FOR LONELY AGED MOTHERS.



CORONA PANEL SNAPSHOT | AU-B1

Insulated Cables

Study Committee Chairman: Marco Marelli (IT) | **AU Panel Convenor:** Russell Wheatland (Victoria)

Scope:

Theory, design, applications, manufacture, installation, testing, operation, maintenance and diagnostics techniques for land and submarine, AC and DC insulated cable systems.

AU B1 Panel membership: 32

Working Groups and Task Forces:

There are currently twenty-five (25) active WGs and two (2) TFs with sixteen (16) participants from Australia and New Zealand contributing as either full or corresponding members. A full listing of Working Groups can be provided on request.

Recent Publications (2019/2020):

SC B1 published six Technical Brochures, two of which are the result of joint works with other Study Committees:

- TB 748 [“Environmental issues of high voltage transmission lines in urban and rural areas”](#)
- TB 756 [“Thermal monitoring of cable circuits and grid operators’ use of dynamic rating systems”](#)
- TB 758 [“Test regimes for HV and EHV cable connectors”](#)
- TB 770 [“Trenchless technologies”](#)
- TB 773 [“Fault location on land and submarine links \(AC & DC\)”](#)
- TB 784 [“Standard design of a common, dry type plug-in interface for GIS and power cables up to 145 kV”](#)

In addition to these, the most important publication has been the Reference Paper on “Overhead Transmission Lines, Gas Insulated Lines and Underground Cables”: a joint work between SC B1, SC B2 and SC B3 that was published in *Electra* 307 (Dec 2019). This paper provides basic information, to explain the fundamentals of the technologies in such a manner that it could be understood by a non-technical person or a person not involved on a day-to-day basis in that industry.

A full list of TBs relating to B1 activities is available on the e-cigre website & is free for CIGRE members.

Creation of a new panel, NZ B1:

The creation of a national B1 panel in New Zealand is well underway. It, like AU B1, will be classed as a mirror panel of the SC B1 and will have the designation NZ B1. The convenor and secretary of NZ B1 will automatically be members of AU B1 to ensure that a conduit for information flow is established between the SC B1 and NZ B1 through AU B1. The AU B1 panel, for a multitude of reasons, already has several members from NZ and these members will remain with the AU panel.

NZ B1 will seek to bring together NZ members from a myriad of disciplines that have a common interest in low, medium and high voltage insulated cables

Upcoming B1 related events to be aware of:

The B1 community is busy on a wide range of activities, the most recent being a series of on-line tutorials that we have called webTutes, as an introduction to the wider industry on all things related to insulated cables. The original plan was to hold a 1.5 day conference in NZ immediately following the AU B1 meeting that was scheduled to be held in Wellington NZ in October. With the current travel restrictions in place, we have decided to take some of the conference topics on-line, and present them in a tutorial format allowing Q&As.

Just because we are practicing social distancing and learning to work from home, don't let yourself and your team members lose touch with the latest developments. Plan to join in one or all webTutes.

The first one is scheduled for Tuesday June 9th, 2020.

Look out for information on the CIGRE Australia and CIGRE New Zealand websites.

Something interesting from the Panel Convenor:

I came across the following quote from our SC chair, *“As we can, with our behaviours, reduce the diffusion of a virus, we can as well influence the diffusion of knowledge, the acceleration of actions [and,] the spread of enthusiasm.”*

Let's get excited about the possibilities that our new working environment can bring. Best regards from the AU B1 panel.

KMS Tips & Tricks

Please **DO NOT** use Internet Explorer or Edge as your browser for the KMS. The KMS is an advanced “wiki” platform using full HTML5 features, hence you will need to use a full HTML5 Browser - two popular ones are Chrome or Firefox.