

Corona Times

4th JUNE 2020
EDITION 4



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

The need for enhanced power system modelling techniques and simulation tools - RP 308-1

The transition to a clean energy future requires thorough understanding of increasingly complex interactions between conventional generation, network equipment, variable renewable generation technologies (centralised and distributed), and demand response. Secure and reliable operation under such complex interactions requires the use of more advanced power system modelling and simulation tools and techniques. Conventional tools and techniques are reaching their limits to support such paradigm shifts.

WEBINAR - FREE

Vegetation fire characteristics and the potential impacts on overhead line performance - WBN006

Major system disruptions have resulted from wildfires under lines. Attention is given to ways to predict the inception of dangerous fire weather. The steps are discussed that can be taken by the designer of OHL as well as the vegetation manager to manage and minimize fire effects on OHL within their managed easements.

NGN CORNER

18 May-24 May was **Volunteers Week** and the NGN co-chairs would like to recognise the significant contribution from its leadership team. We rely on the volunteered time from our NGN liaisons to keep this group going and bring you exciting new content. The Australian group is a leader amongst the global NGN communities, and this wouldn't be possible without their continued support.

We had over 100 attendees at our recent webinar **Introduction to VSC HVDC** presented by *Les Brand*. Thanks to the fantastic efforts of *Matt* and *Maddy* the webinar went ahead perfectly and we look forward to the future webinars that we will be holding later in the year. **Webinar recording can be found here:** [Introduction to VSC HVDC](#)

CIGRE CASE STUDIES

Transpower New Zealand Ltd is using international experience and guidance from CIGRE technical brochures to help guide its strategy and application of protection and automation systems on the Transmission grid.

Within Transpower, more reliance is being given to the provision of enabled auto-reclose schemes on transmission circuits for prompt restoration of supply after power system transient faults.

The international experience and guidance in [TB421 \(The Impact of Renewable Energy Resources and Distributed Generation on Substation Protection & Automation\)](#) and [TB613 \(Protection of Distribution Systems with Distributed Energy Resources\)](#) is helping shape Transpower's approach for increased collaboration with distribution companies on protection systems to ensure safe and effective auto-reclose (and therefore restoration of supply) in the presence of increasing embedded generation.

KIWI COMMENTS

News from across the ditch

The Electricity Authority has released a consultation paper outlining approaches to an enduring market making solution for the New Zealand electricity market. The paper identifies six possible approaches to market making and sets out criteria for assessing each approach.

[The paper Ensuring market making arrangements are fit-for-purpose over time \(607KB, PDF\) is available on the Authority's website. Submissions due 16th June](#)

THE END OF AN ERA

AFTER STANDING FOR SOME 60 YEARS, HAZELWOOD POWER STATION CHIMNEY STACKS IN VICTORIA'S LATROBE VALLEY WERE DEMOLISHED LAST WEEK.

<https://bit.ly/2X5qkh6>



CORONA PANEL SNAPSHOT | AU-B4

DC Systems and Power Electronics

Study Committee Chairman: Mohamed Rashwan (CAN) | **AU Panel Convenor:** John Wright-Smith (MEL)

Scope:

To facilitate and promote the progress of engineering and the international exchange of information and knowledge in the field of DC and power electronics. To add value to this information and knowledge by means of synthesizing state-of-the-art practices and developing recommendations.

Panel membership: 20

Working Groups:

There are currently twenty (20) active WG in B4 with six (6) participants from Australia and New Zealand contributing as either full or corresponding members.

[A full listing of all CIGRE Working Groups can be found here:](#)

Recent Publications: Technical Brochures (all)

- [TB 798 "Implications for harmonics and filtering of the installation of HVDC converter stations in close proximity", WG B4.66](#)
- [TB 766 "Network modelling for harmonic studies", WG C4/B4.38](#)
- [TB 754 "AC side harmonics and appropriate harmonic limits for VSC HVDC", WG B4.67](#)
- [TB 739 "Protection and local control of HVDC-grids", WG B4/B5.59](#)

Reference Papers (of immediate relevance to Australia and New Zealand)

- ["Voltage Source Converter \(VSC\) HVDC responses to disturbances and faults in AC systems which have low synchronous generation", WG B4.87](#)
- ["Flexible AC Transmission Systems \(FACTS\) controllers' commissioning, compliance testing and model validation tests", WG B4.83](#)
- ["Fault Current Limiting Technologies for DC Grids", WG B4/A3.86](#)

All published material is available from the [e-cigre website](#) and is FREE for CIGRE members.

Upcoming B4 related events to be aware of:

Just because we are practicing social distancing and learning to work from home, don't let yourself and your team members lose touch with latest developments. Join a webinar or online learning program. The following events are directly relevant to the scope of B4.

A. CIGRE NGN WEBINAR RECORDING

"STATCOM Tutorial with Australian Case Studies"

John Wright-Smith (B4 Convenor), from American Superconductor (AMSC), conducted this workshop to increase awareness on the following subjects: Renewable energy integration, issues and challenges in Australia; Voltage collapse/voltage instability, and solutions involving Flexible Alternating Current Transmission Systems (FACTS) and; Reactive power and voltage management using STATCOMs. This webinar was extremely popular, with over 200 people registering.

Recorded 8th April 2020 / 09:00-10:30 AEST

Watch the webinar video recording:

[STATCOM Tutorial Recording](#)

B. AEMO WORKSHOP WEBINAR

The Australian Energy Market Operator (AEMO) recently released the Renewable Integration Study (RIS) which is the first stage of a multi-year plan to maintain system security in a future National Electricity Market with a high share of renewable resources. Study page can be [found HERE](#).

An online workshop is being offered on the findings and recommendations of the report. This workshop is scheduled between 10:00 - 11:30am AEST on the 11th of June 2020. [Click HERE to Register](#)

Something interesting from the Panel Convenor:

As far as I know, I am the only person who has been stocking up with sausage and cheese, I'm anticipating the Worst case scenario!

Stay safe and motivated in these challenging times.

Best regards from the AU-B4 panel.

KMS Tips & Tricks

System Emails: KMS Users need to make sure CIGRE KMS system emails are not blocked <https://cigregrgroups.org/x/R447Aw> item #1.3.2. Please make sure your company and Internet Service Provider SPAM filters do not block the following email addresses: admin_cigregrgroups@cigre.org noreply@cigregrgroups.org noreply@cigregrgroups.org.au