CIGRE AGM Hobart – Nov 2018

CIGRE's Next Generation Network





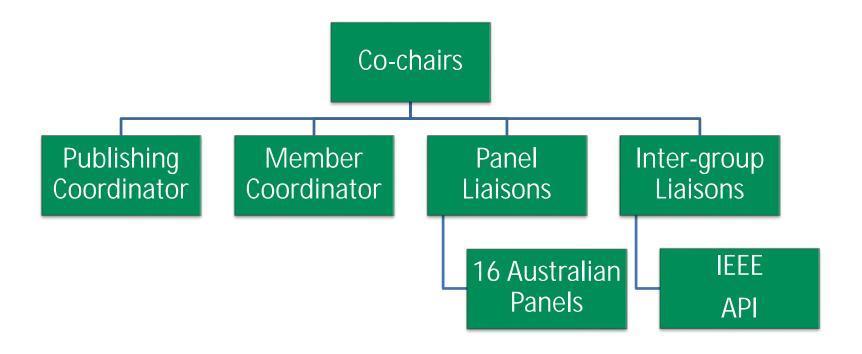
What is the NGN?

- Aimed at CIGRE's Next Generation Network
- Developing the next generation of power engineering professionals and leaders
- Assist knowledge transfer from experienced workforce

Why the NGN?

- CIGRE's initiative for young engineers and students under 35 years
- Travel often a barrier for younger engineers
- Link young engineers and experienced engineers
- Encourage and involve young member participation
- Allow for extended networking opportunities within industry, API and the IEEE

The NGN Structure



What do we do

Promote and increase NGN access to:

- Electronic access to CIGRE publications
- Videos of conference proceedings
- Webinar presentations and Q&As with experts
- Web-based discussion of technical material

Plus seek invitations to participate in:

- Australian Panel meetings
- International working groups
- Scholarships to attend Paris Session
- Industry mentors for university thesis projects

2018 NGN Highlights:

- Launched in late 2013, now 188 members.
- NHP PowerHub site visit
- Multiple Queensland events that increased NGN membership
- API mentoring program
- Explored collaborations with EESA
- More involvement within panel meetings
- NGN Directory

B2 Overhead Lines

Panel Convenor

<u>John McCormack</u>, ElectraNet, Adelaide

[insert photo]

NGN Panel Liaison

Frank Yao, APDpower



Covers:

- Increase acceptability of OHL
- Increase capacities of existing OHL
- Increase reliability and availability of OHL
- Good balance of civil, electrical and structural engineers

Panel Meeting Participation



Panel Meeting Participation



CIGRE Paris Session



AUSTRALIA CIGRE AUS NEXT GENERATION NETWORK



Founded 2013

cigreaustralia.org.au/about/next-generation-network-ngn



MEMBER RECRUITMENT INITIATIVES

- · Technical webinars and networking events
- · Networking directly with industry leaders to cross-promote the NGN
- Involvement in Working Groups

EVENTS

TECHNICAL WEBINARS

- South Australia Power Outage Black Start Event by Tony Myatt, Senior Telecommunications Planning and Design Engineer, SA Power Networks: - ADMS Network Modelling Capabilities, Constraints and Data Requirements by Brad Smith, ADMS Engineer, ActewAGL Distribution

CONFERENCES

CIDER - Conference on the Integration of Distributed Energy Resources NGN members organised a panel session focused on the future of the distributed energy network. Speakers included James Kennedy of Tritium EV Chargers, Simon Bartlett of Univerity of Queensland

NETWORKING EVENTS

NGN and BZ Overhead Lines Networking Event.

10 NGN members attended the networking event to hear how the B2 proceedings went and to network with other NGNers

TECHNICAL VISITS

NGN Tour of Wilson's Transformer Factory

Participants were given the opportunity to see the manufacturing and quality process as well as networking with other NGN members



for the last 3 years I have been a part of CIGRE AU A2 and would like to stay involved with CIGRE A2. I think the three key traits for success on a panel or WG (for me) have been effective communication, technical competence and willingness to have a go at something outside of your comfort zone. My advice: ask your employee to join CIGRE (if they aren't already) and learn about the different study committees. Ask if there is a representative from your employer on that panel and see if there is a NGN position available



Tara-lee MacArthur (APA2 panel member)





■ UNITED KINGDOM CIGRE-UK NEXT GENERATION NETWORK



uk.cigre.org/NGN

NGN@cigre-ngn-uk.org

"NGN helps me to develop my soft skills, broad my knowledge in the power system and provides me the opportunity to volunteer in the Steering Committee 39

Xiaolong Hu

MEMBER RECRUITMENT INITIATIVES

- Technical events (3-4 per year) that covers a broad range of CIGRE Study Committees
- Talks to introduce CIGRE and NGN in companies and universities
- Talks in CIGRE meetings (working group, liaison, etc.) to promote NGN to senior members
- Subsidised and free memberships for qualified applicants

EVENTS

Hosted by Siemens, Manchester, UK. This event was to celebrate the 10th anniversary of the CIGRE UK NGN which is the first CIGRE Next. Generation Network set up over the world. The event is kindly hosted by Siemens UK in Manchester ans successfully attracted 74 attendees. The opening speech is given by Philippe Adam, the CIGRE Secretary General, Adam Middleton, the Chair of CIGRE UK, and Jonathan Halliday, the founder of CIGRE UK NGN, gave talks to share their experience in CIGRE. The event also highlighted by the outlook for the future power system digitalization technologies and wrapped up with the networking and poster session, which allow the young members to present their works

YOUNG MEMBER SHOWCASE PRESENTATION COMPETITION FOR UK REPRESENTATIVES SELECTION

Hasted by the University of Manchester, UK. Ten presentations across wide range of study committees were delivered by NGN members, with four winners eventually nominated for the next step which is presenting at their respective study committee sessions at CKSRE Paris 2018. Apart from the presentations, attendees (27 in total) were also treated to tours to the National Graphene Institute, High Yoltage Lab and Real Time Digital Simulation Lab

NATIONAL GRID TRANSMISSION NETWORK CONTROL CENTRE TOUR

Hosted by National Grid House, Warwick, UK. The tour was organised by CIGRE UK NGN as part of the CIGRE UK AGM. The tour visited the Transmission Network Control Centre operated by National Grid, the transmission owner of England and Wales in UK. The attendees were invited to the control room to observe the real-time network operations and worked on a mock system to learn operation principles and procedures

GRAIN POWER STATION AND SUBSTATION TOUR

Hosted by Grain, Kent, UK. This event provided young members to visit Grain Power Station which is a Combined Cycle Gas Turbine (CCGT) power station sized at 1,365MW combined with a 350MW CHP System and the nearby national Grid's substation which comprises both GIS and AIS components and accompdated the BritNed interconnector

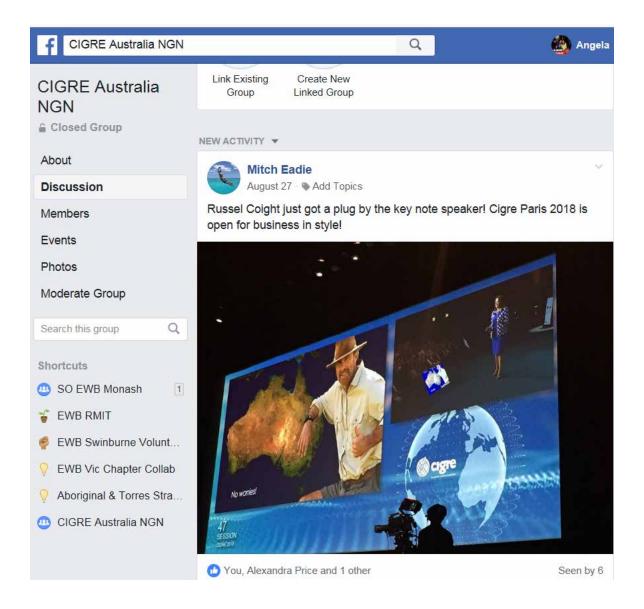
EVENT AT THE HUNTERSTON B POWER STATION

Hosted by Hunterston B, North Ayshire, Scotland. The event was fully booked with 28 young professionals from utilities, consultancy companies and research institutes. Guest speakers Colin Foote and Alan Davenport from Scottish Power Energy Network (SPEN) gave very interesting talks on the developments in SPEN network and specifically the Western Link project. The event also included a technical tour to the plant, which gave the attendees an excellent opportunity to see and know more about how the plant is operated and maintained.

66 Making sure to bring back learning from events and highlight these to your manager helps-e.g if you learn something or make a contact that is then helpful for your job role. Also emphasise the personal development and skills you are learning through CIGRE that help you to be a more well-rounded engineer in your job role 55



CIGRE Paris Session



2019 Plans:

- Increase public presence on CIGRE website
- Increase technical webinars and site visits so seeking speakers and ideas
- Support the organisation and attend CIGRE events
- Encourage all NGN Committee roles to be held for 3 years to allow greater participation and interaction between NGN members and CIGRE
- 2019 Committee Nomination
- Make CIGRE resources more accessible to NGN members

Thank you for you time!

Questions?

