



NGN Feedback Paris Session 2012

CIGRÉ NGN - CIGRÉ UK's Next Generation

CIGRÉ is a permanent international, non government, non-profit-making association, founded in France in 1921.

Its aim is to develop and distribute technical knowledge in the field of the generation and transmission of high voltage electricity.

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1 Introduction

CIGRE UK NGN has had another successful Paris Session. Eleven NGN members attend, with the thanks of subsidised registration from CIGRE. NGN members fully participated in both technical and networking activities including manning the 'Young Engineers' stand. The stand was a huge success, attracting hundreds of visitors from all around the world. Other young members groups, particularly Germany and the USA gave their support in manning the stand and helped to showcase a truly global 'Young Engineers' stand. The Paris session was a great networking opportunity for our team to meet members from other young member groups, as well as individuals who have shown great interest in setting up similar groups. As a result the team was able to increase our network of contacts in 19 countries across 6 continents of the world. Attendees from 5 additional countries would also like to be kept informed. One of the surprises of the week; was getting to know about the existence of a young member group in Russia which consists of 80 members.

The 'Open Forum' was one of the key activities for the young members groups, which gave the opportunity of sharing best practices. Several specific points were presented during this session as a wish list from the young member groups to CIGRE central office, to help the integration of young members into CIGRE main body become more effective and efficient.

Young members had plenty of networking opportunities during the week, including events organised by CIGRE Paris, CIGRE UK and CIGRE NGN.

To keep the technical element of the CIGRE Paris session at the forefront, CIGRE UK NGN organised a young member's technical visit to a GIS substation in Paris. This was attended by over 25 members from around the world.

2 CIGRE UK-NGN Members Experience

'My experience with WG B5.43 'Coordination of Protection & Automation for Future Networks' has been amazing and by attending these meetings I understand the perception of utilities, regulators and manufacturers around the world on the future grid development.

In addition I also attended the WG B4.56 'Guidelines for the preparation of Grid Codes for multi-terminal DC schemes and HVDC grids' as a guest. I found this to be an interesting topic and possible solution to future grid management; I am in touch with the group secretary, discussing opportunities to become part of the working group.

Overall the quality of discussion, challenges, possible solutions and support from senior members in CIGRE, has encouraged and motivated me to be a part and continuous contributor to the working group in whichever way possible.

This was truly a great experience to **Learn, Develop, Inform** and **Network!!**

Amir Khan: Paris Stand Team, NGN Membership coordinator

"I attended the presentations and conclusions of the 'large Disturbances' workshop, partly the open sessions of C6, B3, A2 groups, SC meeting of C1 group as well as full attendance to the B1 open and poster session.

I also took the opportunity to observe the technical exhibition, enquire about the latest products available in the market and create new contacts with key manufacturers.

Manning the stand proved to be very rewarding, I found it a fantastic experience that allowed me to network and exchange experiences with the young members and professionals from all around the world.

It was a fantastic time and I would like to thank CIGRE UK for giving me the opportunity to contribute to such a successful Paris session for CIGRE NGN"

Alberto Villar: NGN Paris Team

"I found the Cigre conference very informative. It was my first time at such an event and I was overwhelmed by the sheer number of working groups, delegates and suppliers. I enjoyed chatting to suppliers at the stands and understanding the latest products available in the transmission industry. I also went to the lectures held on Sunday afternoon which gave in introduction to the week and set out the objectives of CIGRE in the following 5 days.

I attended a couple of WG meetings and various open sessions. The most interesting WG meeting was on Cables where I met Brian Gregory. He explained how the working groups worked and how I could get involved in them. I have since contacted both Mark Waldron and Mark Osbourn, and will be joining a working group soon. I had planned to attend working groups on Monday but was asked to attend the stand for the majority of the day, apart from this I feel I contributed to the event. I perhaps could have attended more open sessions although having a mechanical background somewhat limited my ability to take on what was being discussed. I have since planned to complete a Masters Degree in Electrical Engineering, which will hopefully allow me to contribute more to such sessions."

Richard Wallis: Paris Open Forum team member, NGN International Liaison Coordinator

"Going to the Paris Session was a fantastic opportunity, not only for the technical content but also to meet engineers and experts from around the world. I managed to attend a broad spectrum of events: an SC open meeting (C6), an SC closed meeting (also C6) and a WG meeting (C6.23); as well as the opening sessions and Young Member technical event. Unfortunately this technical session focus meant I only had about an hour to visit the technical exhibition!

Regarding contributions, I was unsure of the format of how these were made so did not feel able to contribute to the C6 open session. However I have offered to help with the SC C6 website and provide some suggestions during the WG C6.23 meetings."

James King: Paris Stand Team, NGN Communication officer

"This year I had my first experience of the Cigre Paris session, and I certainly hope that it will not be my last! As well as helping out on the Cigre Young Members stand, I had the opportunity to attend technical meetings and workshops and to participate in the technical visit organised by the Young Members group.

As my paper had been accepted into the C6 technical session for distribution systems and dispersed generation I was particularly interested in attending this. The format of the technical meetings was different to other conferences I had attended. Rather than the authors giving presentations on their papers; a number of general questions, based on the paper topics, were raised by the special reporters. These questions were answered by any attendees as special contributions; in the form of short presentations, and spontaneous contributions; in the form of comments and questions. Although I did not register a special contribution beforehand I was able to provide a spontaneous contribution to this session. I found the format of the technical meetings really informative, and there were some interesting discussion points. The opening panel and workshops were based on a similar format to other conferences, with longer presentations followed by the opportunity to ask questions. I particularly enjoyed the workshop on large disturbances, which discussed the cause and remedial actions of recent large blackouts around the world.

The technical visit arranged by the CIGRE UK-NGN; was to a 225kV GIS substation in central Paris. RTE, who also kindly sponsored the visit, delivered some really fascinating presentations on the ring based power system in Paris; GIS substations in general, and health and safety substation design considerations. As the trip was for all young member groups, it was also a great chance to get to know better the Cigre young members from around the world. This was the first Paris session where there were other established young member groups, and the groups shared their experiences during the week and at the open forum session."

Angela Rotheram: Paris Stand Team, NGN Vice Chair

"My experience at the Paris Session 2012 was very fruitful. I learnt a lot from the session.

I attended the B5.53 Thematic Meeting which discussed the 'New Network Requirements'. In this session the group came up with several suggestions for topics; to form working groups on. One of the topics discussed that really stood out to me was the 'Identification and application of alternating sensing technologies for protection and automation'. The session was very informative as gaps were identified for research in the new technologies.

I also attended the B5.48 Working Group meeting on 'Protection for developing network with limited fault current capability of generation'. It was a very good experience for me as the Working Group was forming from scratch. It was educational to observe how the experts attending the meeting started from a broad topic and narrowed it down to a scope they could form a Working Group on. I expressed my interest in contributing to the Working Group (e.g. as a coordinator) but because of the lack of expertise in the subject, I was not given the opportunity.

I also attended a few open discussion sessions on different topics including Substations (B3), Distribution Systems and Dispersed Generation (C6) and Protection and Automation (B5). I found the open discussion sessions very informative and it was great knowing about the latest research and development taking place in the particular areas.

As the Events Coordinator for CIGRE NGN, I arranged a technical visit to the RTE GIS Substation for the young engineers from all around the world. The event was very successful, with around 30 attendees and excellent feedback.

I also helped out on the CIGRE NGN Stand, creating awareness about the NGN network amongst attendees from other countries. I encouraged them to form their own organisation for young engineers explaining the benefits and also offered them full support from the UK NGN network.

The Paris Session was a great opportunity for me to network with Experts in the Power sector from all around the globe. I had discussions with members from the CIGRE UK Steering committee to understand how young engineers can contribute to CIGRE Working Groups. I would really like to contribute to a Working Group in the future and I have already contacted the UK conveners for the WGs I am interested in. I would like there to be an opportunity for all the young members to contribute to WGs. This will be of benefit to their technical and professional development. Overall, it was a great learning experience for me and I would really like to be involved in such an event in the future."

Yasir Siraj: Paris Technical Event Coordinator, NGN Event Coordinator

"Technical sessions attended:

B1 poster session and had technical meetings.

WG B1.40

B1 Open session

I feel it was a successful week."

Ross Wilson: Lead Open Forum, Lead Promotional Video, NGN Paris Team

"The things I attended were as follows;

- Wednesday AM: B1 poster session
- Wednesday PM: SC B1 - at the invitation of Julian Head, really interesting to see, will hopefully get an invite to SC B1 in the UK in November at which I may put my name forward for a working group.
- Thursday AM: WG B1/3.33 - dry type GIS plug in connectors, very interesting to see how its done
- Friday AM / PM: B1 panel discussion and exhibition"

Iain Shearer: Helped creating the NGN promotional video, NGN Paris Team

"As well as supporting my fellow NGN representatives at the 'Young Engineers' exhibition stand in Paris, I spent some time visiting the exhibition areas, talking to manufacturers, and finding out about new and emerging technology. As an engineer working for National Grid, I take an interest in emerging technology that could be available to HV substations, eg vacuum circuit breakers (just about to be made commercially available at 77kV).

I attended several poster sessions with a keen interest in SC C5 Electricity Markets and Regulation, I then followed this up by attending the presentation session for C5.

I participated in the EPEE panel forum, which the topic was 'Power System Engineering Education for the Network of the Future'. This was a presentation led discussion, where by the audience were invited to discuss with the panel afterwards.

I was fortunate enough to have time to attend the 'Large Disturbances' workshop. The workshop was a real eye opener to how various TSO's across the globe have had to tackle major power disturbances; due to unpredictable circumstances such as the Japanese earthquake of 2011.

The CIGRE Paris Session was a wonderful opportunity to network with other engineers, energy economists and like minded professionals. Since coming away from the session I feel I have developed my knowledge of the energy industry. I am now in discussions with members of different

WGs with a view to find a suitable position, one which I am able to add value and further develop my skills and knowledge."

Mike Holmes: NGN representative in EPEE, Acting NGN Secretary and Treasurer

"My attendance at Cigre Paris Session was equal to having 10 years of working experience confidence and the ability to interacting with other engineering professionals. In 6 days I was given the opportunity to talk to more than 100 professionals and add value to dozens of discussions. The size of the event on the grounds of attendance and the volume of companies was unprecedented in accordance with my expectations.

After the Cigre Paris session I have a better view and understanding of the organisation and I can see the reasons why it is different to others and provides more opportunities to members to make real contributions. I attended the open session of D1 study committee; which was my area of interest, but I also was at the C1 study committee which triggered my curiosity. As a matter of fact, the session redirected my professional orientation. Overall, I became more confident to speak up and make my voice heard in technical conversations. My next step is to find the subject in which I can contribute most and get involved in a working group through the professional network I have established.

From the CIGRE NGN point of view, I think that the 2012 session was a successful representation of young engineers. I hope that my presence clarified the role of our group in the CIGRE family, and confirmed the future assistance required of other companies, either to encourage their young engineers to get involved or support the group financially.

Regarding the session itself, I was more than happy to identify opportunities for young members like me to add their contributions to the session. If I could give some feedback to CIGRE, I would prefer a more detailed programme of the event. Feedback I received from others about the program was that; many expected to find a timetable for the presentations of the open sessions; this would give the opportunity to attend all the presentations of their interest. Furthermore, I believe sessions could be improved by allowing more than 1-2 questions after each presentation. I noticed in some cases many people left the venue during sessions due to this matter.

I recorded some feedback provided to the NGN that was given through discussions during the session. An improved programme with different promotional techniques will be designed for the next session, which will give further clarity to the aims of the group. The technical visit was welcomed and supported by an unprecedented amount of people, which gave me great satisfaction, as I was one of the coordinators. Since returning from Paris, I feel the team gained experience which has helped to identify what is missing from the UK NGN community and how we can attract more engineers. In future my objectives are to encourage new members to not only attend our events and have access to papers, but to become actively involved in CIGRE family and establish themselves as engineers in the power industry."

"Angeliki Kavvalaki: Paris Social Event Organiser, NGN Support Event Coordinator

"It was my first time at the CIGRE Paris Session and I was overwhelmed by the sheer magnitude of the event itself. This was rather unique experience for me as I had the opportunity of leading the entire portfolio of young member activities for the Paris Session. The climax of the event for me was to see the success of the Young Member stand showcasing young member activities around the globe using various visual aids, 16 posters, promotional video, and flyers. I have had the pleasure of promoting CIGRE UK NGN to vast number of visitors at the stand and supporting my team members to get the best out of this experience.

I have spent fair bit of time at the stand talking to visitors and making sure their interests being heard and recorded. It was great opportunity for me to network with members from other national committees and young members from around the globe.

Apart from being at the stand, by attending EPEE session, I learned a lot about need for change in power engineering education to meet current demand in the power industry. The presentation in YM Forum helped me to share and learn best practices among other young member groups. By attending the RTE technical visit I have learned a lot about GIS technology.

One of the highlights for me was the "large disturbances" workshop, which showed the vulnerability of even modern power system networks due to such unpredictable circumstances. These kind of events emphasise the importance of reliability and the necessity of robust protection systems in modern power systems. I have also attended few other Open sessions C6; smart grids for general interest and B4: where most of the advancements in my line of work. There were some converter topologies presented during the session which was very new to me and I am glad that I was there, to witness with my own eyes the cutting edge technological advancements in HVDC field. I also attended the B4 poster session, where I had discussions with a few of the authors.

I attended the WG meeting on B5.48 where I have volunteered to take one action: I have to look the possibility of providing a HVDC model for protection studies. However I will no longer participate in this group as I find this is out of my scope. However I will look in to the possibility of joining a WG under B4 in the very near future.

Last but not least, I had the opportunity of visiting the exhibition area too. I have had the pleasure of seeing proto types of new vacuum circuit breakers and also transformer model which can be assembled on site."

Aruna Gunatilake: Lead of the YM activities for Paris Session 2012, CIGRE UK NGN Chair

3 Young Member Stand

The stand attracted hundreds of visitors from over 30 countries and 75 contacts were made. Some would like to be kept informed and many would like to create similar young member groups in their home countries.



Sunny Leong Cheng, Paris Stand Lead, NGN membership services

4 EPEE Session

The EPEE panel generated much debate over how power engineers can encourage formal education to attract future engineers into the industry. The other debate was whether higher education is preparing their students for industry, and what can industry do to engage with engineering students and universities globally. It is important that industry understands the syllabus that universities provide; to ensure that students gain the practical skills that are required to make a smooth transition into the world of industry, upon graduation. I found this debate intriguing and thought provoking, as a young engineer recently graduated from higher education I had the experience of what higher education is like from a student perspective.

Coming away from the panel, I felt it was clear that the industry requirements are demanding given the challenges that face the energy industry in the coming decades. These will be the decades of change for the industry as we look to decarbonise and invest heavily into renewable generation and the networks that can support such technologies. This is a great time to join the industry, but at the same time industry needs graduates to filter in that are not just theoretically qualified, but possess the skills that lead to engineering competence. I am now going to make efforts within my company to see what contributions and differences I can make in how our company can engage with Universities and Colleges. I will also be using my position within the NGN to sway the focus towards having joint events with Universities, and greater communication with the university graduates and students.

Mike Holmes: NGN representative in EPEE, NGN Acting Secretary and Treasurer

5 Open Forum

Over 25 members were attended this forum, among them were senior members from CIGRE UK national committee and CIGRE New Zealand national committee, young members from all over the world.

Key note speech was held by Phil Harris, CEO tres amigas followed by presentations by the chairman from each young member groups, UK, Germany, USA and NZ (NZ NC Chair) was given to show the YM member profiles. It was a good forum to share best practices between each young group. A wish list was presented at the discussion session by chairman of German group to CIGRE CO to enhance the integration process for young members to CIGRE main body.

Remarks:

It would have been even better if we had more participation from senior members from each NC.

The event was not very well advertised by Paris CO, a better participation could have been anticipated if this session was in the main program.

Ross Wilson: Open forum lead

6 Young member Technical Event

As part of the CIGRE Paris Session 2012, CIGRE UK NGN organised an event for the young engineers to visit the Seine GIS Substation. The event started with a welcome speech and an introduction to RTE, the Transmission System Operator in France and a brief talk about CIGRE UK NGN. This was followed by presentations on the electricity supply network of Paris. Other Presentations included topics like the GC Characteristics of the 225kV Substation, the main features of the Substation and the Power Transformers and the final presentation was on the 225kV cables supplying electricity to Paris. This was followed by a tour around the GIS substation, including visits to the actual GIS Building, transformer building and lastly to the substation control and protection rooms.

The event was quite popular with approximately 30 people attending from 10 different countries. The idea was to give them a good feel for the sort of events we conduct as CIGRE UK NGN and to encourage them form respective groups in their own countries, and organise similar events to make the CIGRE community more active globally. The feedback was generally very positive and the attendees were grateful to CIGRE UK NGN for organising such an event.





Yasir Siraj, Angeliki Kavvalaki, Aruna Gunatilake: Events Coordinators

7 Networking events

1. CIGRE Paris Networking event at the Louvre.



Young member teams, UK and Germany



Young member teams, UK

2. CIGRE UK networking event



8 Young Member Social Event

The last event in Cigre NGN programme was a social meeting which aimed to bond the NGN groups met in the Paris Session 2012 and to establish new relationships with other young engineers who visited the Young Member Stand. Therefore, the event was organised the last night of the session in order to mark the contribution of NGN team.

The event was advertised before the session and during the session people were invited when they visited the stand. The night was a dinner in Le Bistrot St Ferdinand (close to the conference venue) with a set French menu so people will have the chance to try French cuisine. Finally, 20 people attended the event from 5 different countries including; Australia, Russia, Sweden, UK, USA. The feedback was more than satisfying and encouraging to keep these events in the CIGRE agenda to give people the chance to bond.



Angeliki Kavvalaki: Events Coordinator

9 Conclusion

In general the event was very successful. We will start supporting new found contacts in helping to create similar groups in their home countries.

Improvement for future sessions:

Some members had to be at the stand for long hours. At the next session everyone from the UK team should follow the schedule as planned or organise others to swap with them.

Informing members of how to get into WG meetings as an observer should take place earlier.

List of contributors

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