



# Call for Papers

## CHANGES NEEDED IN THE POWER SYSTEM for the Energy Transition

**International Symposium hosted by the Nordic Regional Council of CIGRE (NRCC) in Trondheim, Norway on May 12–15, 2025**

**Participating CIGRE Study Committees (SC):** SC A3 Transmission and distribution equipment, **SC B1 Insulated cables (co-lead)**, SC B2 Overhead lines, SC B3 Substations and electrical installations, SC B4 DC systems and power electronics, SC B5 Protection and automation, SC C2 Power system operation and control, SC C3 Power system sustainability and environmental performance, **SC C4 Power system technical performance (co-lead)**, SC C6 Active distribution systems and distributed energy resources, SC D2 Information systems telecommunications and cybersecurity.

### SYMPOSIUM THEME

The CIGRE NRCC 2025 symposium in Trondheim will be on the theme: Changes Needed in The Power System – for the Energy Transition. This will be divided into two topic streams:

#### **PS1: Integration of renewable energy resources to the grid**

- Environmentally friendly power grid and its equipment
- New applications and technologies applied to AC and DC onshore and offshore grid
- AC and DC onshore and offshore grid
- AC grid development, protection of the future meshed AC and DC system
- Sector integration including hydrogen, EV, energy hubs, DER
- Services/operation applied to AC and DC onshore and offshore grid
- Monitoring the system applied to AC and DC onshore and offshore grid
- Maintenance and Services applied to AC and DC onshore and offshore grid

#### **PS2: Technologies supporting the power grid for energy transition to carbon neutral energy production**

- Requirements for power grid and its equipment
- Inverter based control interacting with existing system and Converter stability issues (resonance stability, converter driven stability)
- Coordination between AC and DC networks
- Grid forming
- Multivendor interoperability
- New modelling tools
- Planning and operation of lower inertia system
- System analysis (technical)
- Black start and resilience aspects including DER integration
- Optimize and increase the capacity of the energy transmission network
- Reliability and security – critical infrastructure

## SYMPOSIUM VENUE

Trondheim is the 3rd largest city of Norway. The university NTNU together with the SINTEF research institute leads the world in many technology-based research areas. Nidaros Cathedral is one of Trondheim's most famous tourist attractions and is worth a visit.

The venue for the Symposium will be Clarion Hotel Trondheim. 19 meeting rooms - with a capacity of 1800 participants for the largest one – make Clarion Hotel one of Scandinavia's largest convention centers. Discover the view on the fjord, enjoy the modern Nordic design and the vibrant atmosphere.



## SUBMISSION OF SYNOPSES

Participants wishing to present and publish papers should submit synopses on the following link <https://www.conftool.pro/cigrenccsymposium2025>.

The instructions, synopses and paper templates are available on <https://cigrenccsymposium2025.com/>. All synopses, papers, and presentations must be in English. Please note that at least one author should present the paper at the symposium.

## COMMITTEES

### Symposium Steering Committee

Chair	Rannveig S. J. Løken
CIGRE Technical Council Chair	Rannveig S. J. Løken
CIGRE Secretary General	Philippe Adam

### Organising Committee (NRCC):

Chair NO	Rannveig S. J. Løken
Member FI	Liisa Haarla
Member SE	Bo Westman
Member DK	Claus Leth Bak
Member EE	Ivo Palu
Technical Co-Chair	Marta Val Escudero
Technical Co-Chair	Geir Clasen

### Technical Organising Committee:

Co-Chair SC C4	Marta Val Escudero
Co-Chair SC B1	Geir Clasen
Member SC A3	Nicola Gariboldi
Member SC B2	Pierre Van Dyke
Member SC B3	Mark Mcvey
Member SC B4	Joanne Hu

Member SC B5  
Member SC C2  
Member SC C3  
Member SC C6  
Member SC D2

Volker Leitloff  
Renuka Chatterjee  
Mercedes Vázquez  
Kurt Dedekind  
Victor Tan

## PROGRAMME

The technical program will open with Tutorials and Workshops on Monday May 12 followed by the Welcome reception on Monday evening. The symposium has two full days on Tuesday and Wednesday, May 13 and 14 with parallel sessions. Thursday May 15 will offer a technical tour. Individual Study Committee and Working Group meetings will take place from May 9 to 15.

Next Generation Network (NGN) and Women in Energy (WiE) sessions are part of the symposium. Information on these sessions as well as social program and program for companions will be available on the webpage.

## PAPER PUBLICATION

Papers will be available to download one month in advance of the symposium for registered participants as described in the webpage. One month after the symposium, CIGRE members can download, and other can purchase papers on [www.e-cigre.org](http://www.e-cigre.org). CIGRE Science & Engineering (CSE) journal will publish the best papers selected from the symposium. The Symposium Technical Committee will produce a summary report of the symposium for publication in Electra.

## REGISTRATION

Registration will be opened on August 1, 2024. Together with preliminary program information, synopsis and paper templates will be available on the webpage.

## KEY DATES

Call for papers	March 18, 2024
Registration starts	August 1, 2024
Deadline for Synopses in ConfTool	<b>September 27, 2024</b>
Selection of synopses by SCs and information to authors	October 18, 2024
Deadline for full papers	February 3, 2025 2 am CEST
Acceptance and other feedback to authors of full papers	March 3, 2025
Final papers to ConfTool	April 7, 2025