

CIGRE Paris 2026 Key Take-Aways

Study Committee C6, by Evert de Haan



C6 agenda during the conference

Monday

- Opening panel

Tuesday

- Poster Session
- Tutorial: Distributed Energy Resources Enabling Resilience

Wednesday

- Study Committee Meeting

Thursday

- Group Discussion Meeting

Poster session



Poster Session

- 110+ posters were presented over two sessions
- 3 posters were NGN papers
- 2204 attendees
- Great interest and a lot of interaction

Poster Session – Salient items

- **How to include customers in grid management?** Discussion between posters/papers:

- Time-of-use pricing? 11759, 11937, 10716
- Dynamic network pricing? 10716
- Dynamic connection limits? 12470, 10717, 12365, 10716
- Pay for performance? 10716
- Nodal network pricing? 10716
- Flexibility markets? 12470, 11740, 11989
- Incentives/Other? 10913, 12633

What is optimal to whom and what is fair? Rebound effects?

Poster Session – Salient items

- **The “polluter” pays.** In the USA, the customer who triggers a grid reinforcement (e.g. a data centre) has to pay (a part) of the cost for the grid reinforcement (similar to the discontinued “bedrijventerreinregeling”).
- **Diminishing generator ROI. Spoiler:** Batteries drive down market prices (e.g. Australia). This makes it harder for generators to have a positive investment business case.
- **PV Flicker is not an issue.** “Have you ever watched the speed of the clouds?”

Poster session: recurring trends

- Hosting capacity
- Soft open points
- Sector coupling (system integration)
- DER as alternative to grid investments
- EV adoption
- Optimisation from a network perspective
- Microgrids
- Power quality/Voltage control
- BESS sizing and operation

Tutorial



Tutorial: Distributed Energy Resources Enabling Resilience

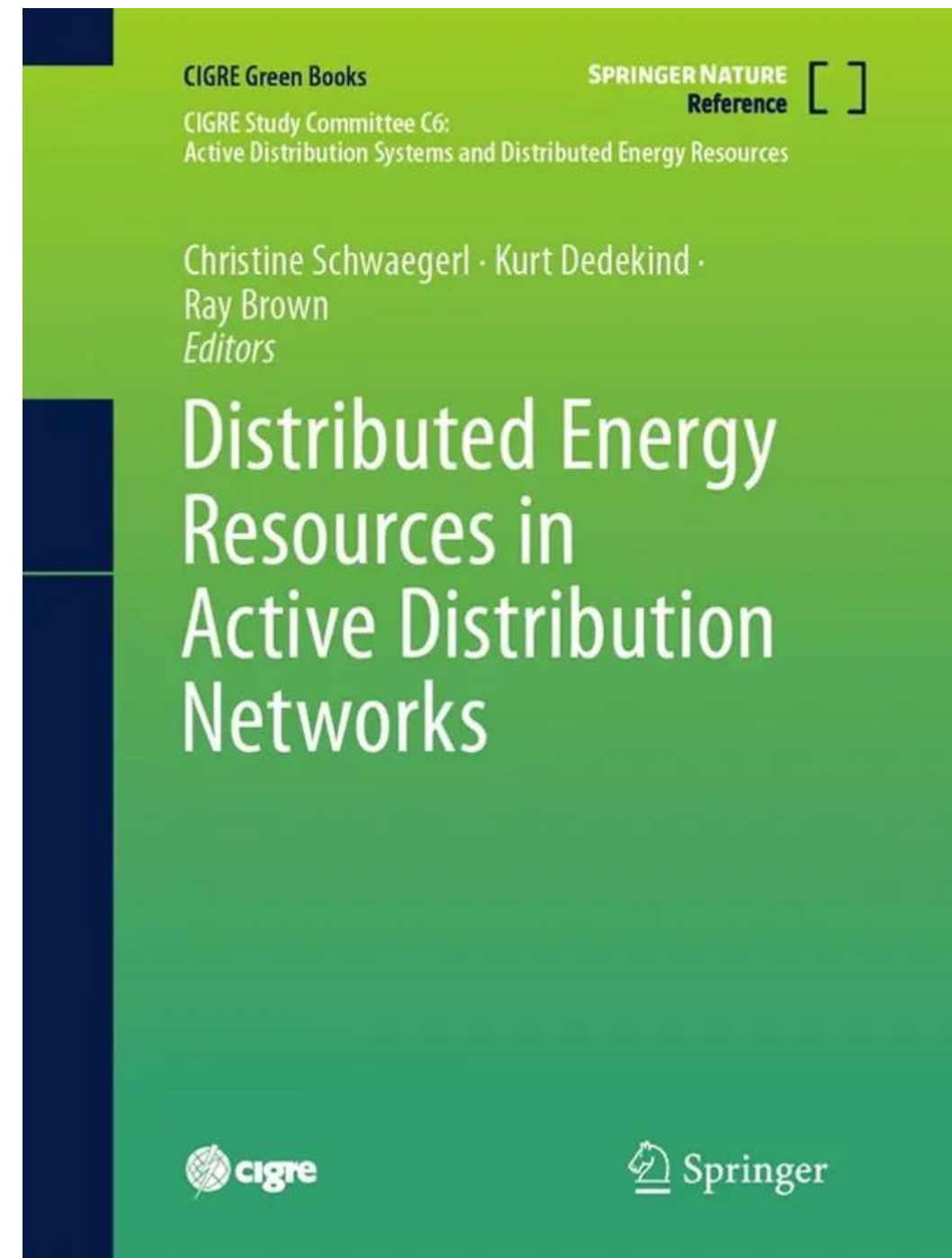
- 491 attendees
- Reliability (frequency, duration) → Resilience (speed of recovery, impact severity)
- DER can support resilience:
 - Storage
 - Microgrids/Islanding
 - Demand response (incl. EVs)
- C1 continued the discussion on resilience in their Group Discussion Meeting

Study Committee Meeting



Study Committee Meeting: An industry standard delivered

- Part I - Distributed Energy Resources (DER) Assets
- Part II - Active Distribution Networks
- Part III - Applications, Rural Electrification, and Off-Grid Systems



Study Committee Meeting: Proposed new Working Groups

Dynamic operating envelopes

In what way may dynamic capacity constraints be determined and communicated to (LV) users?

Data Centres as Active Distributed Energy Resource (DER) Systems

In what way may data centres act as a DER to the electricity system?

Study Committee Meeting: Future events

Heidelberg 2027



CIGRE Symposium 2027

Heidelberg, Germany · April 27–30, 2027

Symposium Theme

CIGRE's 105-year experience of integrated grid complexity will be showcased with technical and practical applications for System Operators, Experts, and Manufacturers to engage actively in CIGRE's Symposium in Heidelberg – **Distribution and Transmission, working together, as One Grid.**

Distribution and Transmission are blurred without boundary for today's One Grid. Power flows are becoming more dynamic and less predictable, while system inertia, fault levels, and voltage control characteristics are changing across all voltage levels. This unprecedented transformation puts Distribution at the core of the Energy Transition, intertwining the challenges of Transmission, Supply, and the Grid Edge.

Join us at the CIGRE international symposium on the Energy Transition in Heidelberg!

Programme

The **tutorials** and **symposium sessions** will take place from Tuesday, April 27 to Thursday, April 29, 2027.

The accompanying **exhibition** will be open during the main symposium, on Wednesday, April 28 and Thursday, April 29, 2027.

A **technical tour** is scheduled for Friday, April 30, 2027.

Detailed information on the programme, the working group sessions, the technical tours and the accompanying tours can be found at www.cigresymposium2027.de

The CIGRE Symposium is held in cooperation with the German Conference on Power Systems "ETG Kongress", which will take place at the same venue on April 26–27, 2027. For more information, please visit www.etg-kongress.com/de

Symposium Venue

Heidelberg is one of Germany's most enchanting cities, famous for its historic Old Town, romantic castle, and vibrant university atmosphere.

As a hub for science, culture, and global collaboration, it also offers the perfect blend of tradition and cutting-edge innovation.

Also known for its riverside views of the picturesque Neckar River, Heidelberg is conveniently located south of Frankfurt, making it reachable in less than an hour by car or train from Frankfurt International Airport and many national and international destinations.

All technical sessions and the exhibition will be held at the Heidelberg Congress Center, which is characterised by its visionary architecture, and located just steps from the main station.



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Paris 2028

Preferential Subject 1: Planning and Operations for High DER Penetration

- Hosting capacity, including dynamic hosting capacity
- Electric vehicles and power-to-X
- TSO-DSO co-ordination and whole of system planning

Preferential Subject 2: Flexibility and Orchestration

- DER management systems and customer interface
- Aggregation and virtual power plants
- Provision of network services, including resilience

Preferential Subject 3: Applications

- Microgrids, off-grid-systems and rural electrification
- New technologies including DC distribution systems and hydrogen
- Multi-energy systems

Group discussion meeting



Group Discussion Meeting

Statistics

- 121 papers were submitted
- 52 prepared contributions
- 1 NGN presentation
- 1 Working Group presentation
- 507 participants

Special Report

- Available for download [here](#)

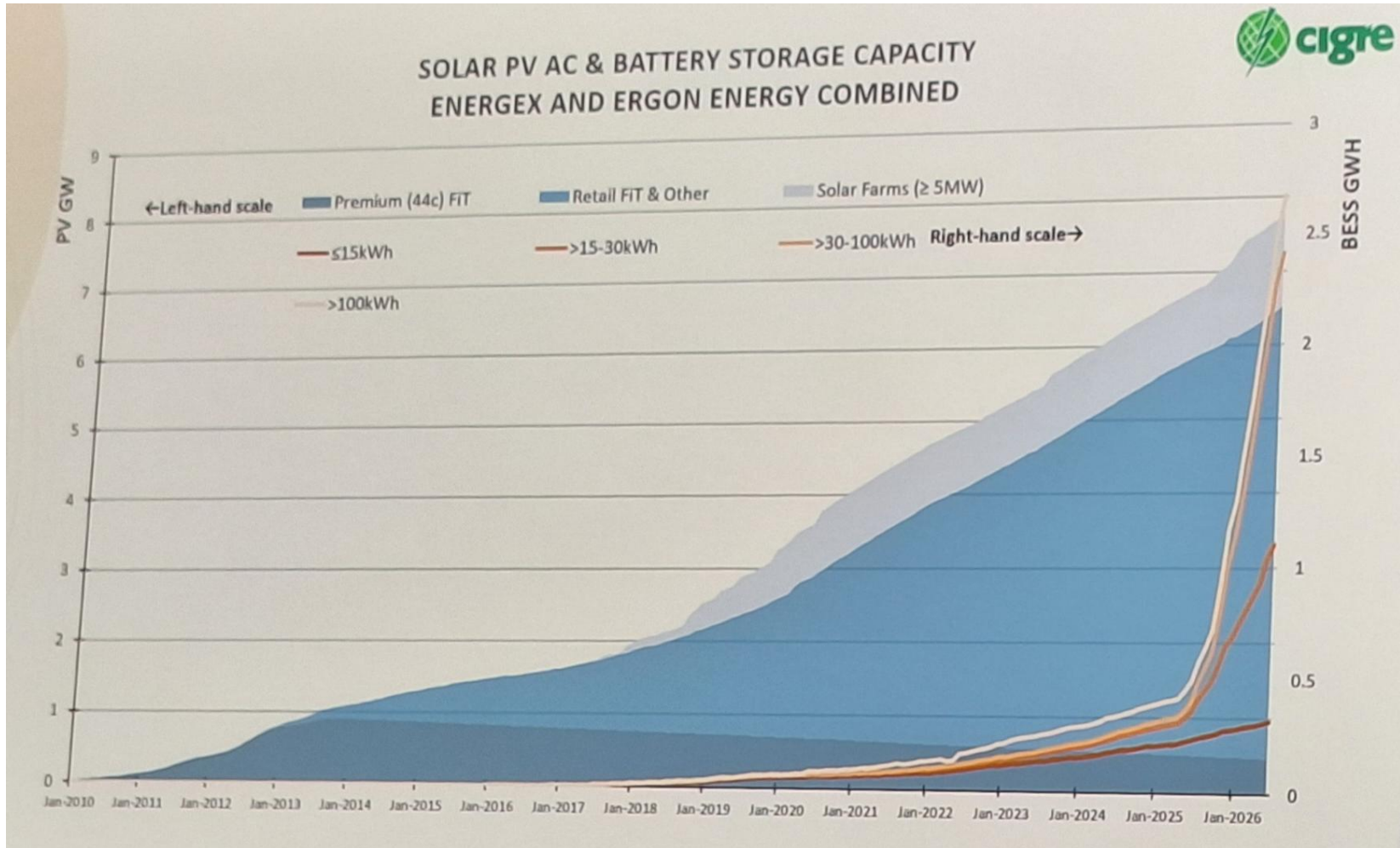
Preferential subjects

- Enabling flexibility in distribution networks
- Planning and operations for 2030 and beyond in active distribution systems
- Rural and Industrial Electrification: Standards, Practices and Technology Options

Group Discussion Meeting – Salient items

- **Implicit/Explicit flexibility:** Customer behaviour may be influenced implicitly (*pricing → shapes autonomous behaviour, preserves customer control*) and/or explicitly (*aggregation → visibility and verification, enables dispatch, operational reliance*).
- **Dynamic Operating Envelopes:** Use DOEs to proactively mitigate runaway feedback loops before they manifest as network constraints.
- **LV state estimation:** An MV/LV transformer monitor, 20% of smart meter penetration and correct phase IDs give reliable insight without a network model.
- **Load management:** Dynamic pricing is emerging as a non-direct control method. It encourages consumers to shift their energy usage patterns. No guarantees for certain responses, though.

Group Discussion Meeting – Salient items



Batteries are flattening Australia's duck curve

And battery capacity will double in the next 2 years



Q2 median 5-minute wholesale prices by time of day, demand-weighted across NSW, QLD, VIC and SA. Source: AEMO

@gavinmooney

THE END

of an era...

