

Special Compendium on the 2023 IEEE 8th Electronic Grid Workshop (eGrid 2023)

Deadline for Manuscript Submissions: 01.01.2024

Scheduled Publication Time: 09.2024

Papers that demonstrate the potential of power electronics components and applications in achieving an increased power and energy flexibility in energy grids. Topics of interest include, but are not limited to:

Power Grid of the Future

- All power electronics grids, DC grids, multi-modal and cellular grids
- Solid state transformers, FACTS, HVDC, and emerging power electronics technologies
- Flexibility and service provision, DSO-TSO coordination, AI-based control in the grid
- Cyber-physical-grids: energy packet, internet of things, cybersecurity

Power Electronics testing in real world

- (Power-) Hardware-In-the-Loop: stability, accuracy and applications
- Real time modelling and digital twins
- Solid State circuit breakers: design and testing

Energy Storage systems

- Battery, supercapacitor, and hybrid energy storage systems
- Hydrogen-based energy storage systems
- Optimal sizing, energy management, services, and experimental validation of energy storage systems

We will be accepting selected full journal articles that have been already accepted at the IEEE 8th eGrid 2023 Workshop. A paper submission is still expected to include a literature review to establish its relationship to prior work, and present sufficient results to prove the validity and viability of the proposed concept. Submitted manuscripts should include at least 30% more in terms of theoretical development, experimental results, or literature background than the eGrid workshop paper.

All manuscripts must be submitted through Manuscript Central at <https://mc.manuscriptcentral.com/oj-pel>. Submissions must be clearly marked “eGrid 2023 Special Compendium” on the cover page. When uploading your paper, please select the corresponding manuscript type for the special compendium. Please refer to <https://www.ieee-pels.org/> for general information about submitting through Manuscript Central.

Guest Editors	Guest Associate Editors	Proposed Timeline
Giovanni De Carne , Karlsruhe Institute of Technology, Germany Marco Liserre , Kiel University, Germany	Zhixiang Zou , Southeast University, China Tommaso Caldognetto , University of Padua – Italy Sebastian Hubschneider , OPAL-RT, Germany Gab-Su Seo , NREL, USA Giampaolo Buticchi , Nottingham University, Ningbo Campus, China	01.01.2024 : Submission Deadline 03.01.2024 : First-Round Notification 04.01.2024 : Major Revision Deadline 05.01.2024 : Second-Round Notification 07.01.2024 : Forwarded to IEEE for Publication 09.2024 : Articles appear in OJ-PEL