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Call for Papers for the Special Session on

Cybersecurity Frameworks for Modern Power Systems: Threats, Resilience, and Intelligent Defence

Organized and co-chaired by

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Technical Outline of the Session and Topics

The rapid digitalization of modern power systems-driven by wide-area measurement systems, renewable energy integration, cyber–physical controllers, IoT-enabled substations, and cloud-based energy management-has significantly improved operational efficiency and flexibility. However, this transformation has simultaneously exposed power systems to severe cybersecurity threats. There is a critical need for comprehensive cybersecurity frameworks that integrate detection, mitigation, resilience, and recovery strategies while ensuring system stability, reliability, and real-time performance.

Topics of the session include, but are not limited to:

- Cybersecurity frameworks for smart grids and cyber–physical power systems
- Cyber threat modelling and vulnerability assessment in power networks
- Detection and mitigation of DoS, FDI, replay, and coordinated cyber–physical attacks
- AI- and machine learning–based cyber intrusion detection in power systems
- Cyber-resilient load frequency control and voltage regulation
- Security of wide-area monitoring, protection, and control (WAMPAC) systems
- Cybersecurity challenges in renewable-integrated and low-inertia power systems
- Protection of microgrids, virtual power plants, and distributed energy resources

Timeline for Authors

All the instructions for paper submission are available on the conference website. Please visit www.iecon2026.org or scan the QR code for the timeline.