



ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

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Special Session on

Renewable Energy Communities: Local Energy Markets and Energy Management Systems

Organized and co-chaired by:

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Call for Papers

Technical Outline of the Session and Topics:

With the increasing ubiquity of Renewable Energy Communities (RECs), the need for improved local energy management systems and local energy markets has become more pressing. RECs, also known as “Community Solar” communities in the US, are associations that produce and share renewable energy, generating and managing cost-effective green energy autonomously, reducing CO2 emissions and energy waste. Energy Management Systems for RECs cover local power system at the mini-grid, micro-grid and nano-grid levels. Local Energy Markets for RECs are based on regulatory frameworks that include reward schemes for energy prosumers such as net billing and net metering and Transactive Energy Systems based on technologies such as the blockchain and game theory. The goal of this special session is to provide a venue to discuss the latest REC trends in the light of recent advancements in local Transactive Energy Frameworks and Energy Management Systems.

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

- Renewable Energy Communities
- Virtual microgrids
- Community solar
- Energy Management in renewable energy communities, virtual microgrids or community solar
- Local Energy Markets
- Energy Blockchain
- Market dynamics and pricing mechanisms
- Game Theory in Energy Trade
- Regulatory Frameworks for Renewable Energy Integration
- Smart Cities
- Carbon Trading
- Demand response and load management
- Internet of Things (IoT) applications in community energy systems
- Smart home and building technologies.

Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024
Early submission is highly encouraged for early decision notifications!	

All the instructions for paper submission are included in the conference website:

www.iecon-2024.org

