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Call for Papers & Participation

Technology for the 21st Century Electric Utility

The Grid of the Future Symposium, sponsored by the ***CIGRE US National Committee (USNC)***, with the theme Technology for the 21st Century Electric Utility, will be held **November 7–10, 2022** in **Chicago, IL**.

The Symposium, hosted by ***Commonwealth Edison***, will be a forum for the participants to discuss state-of-the-art innovations in generation, transmission, distribution, and innovative smart grid technologies.

Grid of the Future 2022 will feature plenary sessions, technical paper sessions, and tutorials by international experts. Contributions from Next Generation Network (NGN) young engineers are encouraged.

Dates & Deadlines

July 31, 2022:
Complete manuscripts must be submitted by July 31, 2022 via email to GOTF@tamu.edu. The paper should be formatted in accordance with the CIGRE Publications Guide.*

August 22, 2022:
Notification of acceptance.

October 7, 2022:
Deadline for submission of final paper with required changes.

Tutorials

The conference has reserved space for smart grid tutorials and panel sessions.

If you are interested in organizing a tutorial or panel session, please contact John McDonald, Technical Program Chair at **johnd.mcdonald@ge.com**.

Symposium Chairs

Chris Root
USNC President
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B. Don Russell
CIGRE USNC Secretariat
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John McDonald
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*available at: cigre-usnc.org/grid-of-the-future-2022

The Symposium scope covers the following general topics:

Enhancing Grid Resilience: Infrastructure Resilience, Microgrids, Resilience Quantification, Big Data for Resilience, Resilience Planning, Aging Infrastructure & Asset Management, FLISR, DC Microgrids, Proactive Reconfiguration, Community Resilience, Localized Resilience Benefits, Battery Energy Storage System (BESS), Mobile Storage, Long Duration Storage, Wind and Solar Integration

Grid Operation, Automation & Management: Modern Energy Management Systems (EMS), ADMS, Renewable Integration, Solar & Storage Microgrid, Long-Duration Storage, Demand Response, Energy Efficiency, Innovations in Battery Chemistry, Battery Diagnostics, Cybersecurity Standards, Advanced Communication Applications, Fiber, LTE, 5G, Broadband, IoT-based Wireless Technologies, Software Defined Wide Area Network (SD-WAN), Network Function Virtualization (NFV), Edge Computing, Smart EV Charging, Vehicle-to-Grid (V2G), Vehicle-to-Anything (V2X)

Climate Change Adaptation: Climate Risk to System Assets, Managing the Impact of Decarbonization, Improving Grid Biodiversity, Innovative T&D Engineering to Limit Environmental Impacts, Life-Cycle Assessment, Generation Planning, Policies and Regulations, Migration Effects, Clean Energy During Pandemic and Global Unrest, Distribution Markets

Intelligent Protection and Controls: Voltage Optimization, T&D Monitoring, Adaptive Relaying, Automation and Restoration, Bi-directional Power Flow, IEC 61850, Digital Substation, System Reconfiguration, DERMS, Home and Building Automation, DER Protection Study, DER Integration and Control

Beneficial Electrification: Smart Cities, Smart Villages, Smart Homes, Managed Charging, Fleet Electrification, Vehicle-to-Grid (V2G), Vehicle-to-Anything (V2X), Autonomous Vehicles, Extreme Fast Charging, Plug-in Hybrid EV (PHEV), Wireless Charging, Building Electrification, Conservation Voltage Reduction, Industrial Electrification

T&D Modeling, Sensors and Data Analytics: Real-time Modeling, Hardware-in-the Loop (HIL), Control-HIL, Digital-Twin, DER Modeling, Hybrid AC-DC Systems, Cyber-Attack Modeling, EV Modeling and Simulation, EV Planning Studies, Synchrophasor Technology, Power Quality, AMI Data, Bellwether Meters, Low-Cost Sensors, Big Data, Quantum Computing, Blockchain, Artificial Intelligence, Machine Learning