

INTRODUCTION

Sponsored by IEEE, IEEE IAS, organized by Shanghai Jiao Tong University, co-organized by University of Electronic Science and Technology of China, Shandong University, and North China Electric Power University, 2022 IEEE IAS Industrial and Commercial Power System Asia (IEEE I&CPS Asia 2022) Conference will be held during July 8-11, 2022 in Shanghai, China.

IEEE I&CPS Asia 2022 will focus on '**Towards Low-carbon Power System**', and aim to provide a high quality platform for researchers, practitioners, professionals, and students from all over the world to present their latest research findings, ideas, and applications in the related fields of Power Systems. Featured with keynote session, technical session, tutorial session and special session, IEEE I&CPS Asia 2022 will provide the delegates an unparalleled opportunity to exchange with qualified professionals and build future partnership.

SPECIAL SESSION ON

Resilience-Oriented Advanced Techniques for Power Systems with High Penetration of Renewable Energy Sources

Renewable energy, such as wind and solar photovoltaic, has been developed and utilized all over the world due to the global efforts to reduce carbon emission and various environmental regulations. In this situation, it becomes quite urgent to make use of renewable energy to improve power system resilience to resist high impact low probability events, which are weather-related disasters (e.g. typhoon, earthquake, wildfire, etc.) and man-made cyber-physical attacks. However, the output of renewable energy is deeply dependent on weather conditions. Weak controllability and anti-disturbance, as well as its uncertainty, have brought great challenges to enhance the resilience of power systems with high penetration of renewable energy. Therefore, it is necessary to introduce resilience-oriented advanced techniques for power systems with high penetration of renewable energy sources with an objective of constructing resilient power systems to resist disasters and man-made attacks.



TECHNICAL OUTLINE OF THE SESSION

This special session focuses on a hot research topic — resilient power systems. Due to the impact of global warming and rapid development of information technology, the occurrence frequency and intensity of weather-related and man-made extreme events have shown an increasing trend, which poses great challenges to maintain the reliable and secure operation of power systems. Improving the resilience of power systems is an effective means to solve the problems. In this sense, resilience-oriented advanced techniques for power systems with high penetration of renewable energy resources are strongly encouraged in this special session. Topics of interest include (but are not limit to): resilience-oriented planning, hardening, preventive scheduling, and restoration.

SPECIAL SESSION ORGANIZERS

Heng Zhang

Shanghai Jiao Tong University

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IMPORTANT DATES

Submission Deadline

May 15, 2022

Notification Deadline

June 15, 2022

PUBLICATION

Submissions to IEEE I&CPS 2022 will be peer reviewed on the basis of technical quality, relevance to conference topics, originality, significance, clarity, etc. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements.

Please enter IEEE I&CPS Asia 2022 online submission system and choose 'SP002: Resilience-Oriented Advance Techniques for Power Systems with High Penetration of Renewable Energy Sources' to submit papers.

Submission Link:

<https://easychair.org/conferences/?conf=ieeeciapsasia2022>