IEEE I&CPS Asia 2022

SHANGHAI, CHINA
JULY 8-11, 2022

2022 IEEE IAS INDUSTRIAL AND COMMERCIAL POWER SYSTEM ASIA

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

Massive Growth of Grid-integrated EVs: Challenges, Opportunities, and Solutions

As one of the key technologies to achieve decarbonization, electric vehicles (EVs) and charging piles are experiencing rapid growth internationally. Aggregated and unsupervised EVs' charging load is posing challenges on existing distribution networks. Generally, power quality issues including grid overloading, phases unbalance, increased power losses are the main concerns. These undesired impacts have obstructed large-scale EVs integration and are calling for proper planning and controlling schemes that optimally coordinates EVs charging. On the other hand, EVs batteries are promising mobile storage systems on the demand side. They can serve for multiple purposes, such as demand response, energy arbitrage, and peak shaving, via employing the vehicle-to-grid (V2G) scheme. Therefore, it is a highly valuable research topic to investigate and reveal the potential impacts and solutions of EVs integration on a large scale in view of EVs' extended penetration.

TECHNICAL OUTLINE OF THE SESSION

Due to the decarbonization objectives in transportation sector, the development of electric vehicles (EVs) and charging piles are gaining significant attention worldwide. However, uncoordinated EVs charging could lead to serious problems for distribution systems, compromising power quality and security. Meanwhile, the maturity of vehicle-to-grid (V2G) techniques makes it possible to exploit the flexibility of EVs to serve as mobile storage systems. Therefore, how to mitigate EVs unwanted effects and maximize potential benefits has gained research interests over the last few years. To ensure the smooth integration of EVs on a large-scale, intelligent planning and management techniques for power systems with extended EVs' penetration are strongly encouraged in this special session. Topics of interest include (but are not limit to): charging load forecasting, charging station planning, intelligent charging management, market-oriented operation schemes, interconnection of power and transportation systems.

SPECIAL SESSION ORGANIZERS

Yun Zhou	Shanghai Jiao Tong University
Donghan Feng	Shanghai Jiao Tong University
Hengjie Li	Lanzhou University of Technology

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 'SP005. Massive growth of grid-integrated EVs: Challenges, Opportunities, and Solutions' to Submit Papers.

Submission Link:
https://easychair.org/conferences/?conf=ieeeicpsasia2022

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