SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING
Website: https://cde.nus.edu.sg/ece

Area: Power and Energy Systems

Host: Professor Dipti Srinivasan

Jointly organized by:
IEE Computational Intelligence Society,
IEEE Power & Energy Society,
Green Energy Management and Smart Grid Research Center

TOPIC	:	**The DLMP-based Equilibrium Optimization Strategy for Data Center Park with Spatial-Temporal Demand-side Resources**
SPEAKER	:	**Mr. Yang Zhihao** **Graduate Student, Hohai University**
DATE	:	**Friday, 12 August 2022**
TIME	:	**12:00PM to 12:30PM (SG)**
VENUE	:	**Join Zoom Meeting:** **https://nus-sg.zoom.us/j/88115646004?pwd=ZGFYVTM2NWJ4eWRaNTZRTjZ5UkUrUT09** **Meeting ID: 881 1564 6004** **Passcode: 335169**

ABSTRACT

Data center buildings have caused the increasing of energy consumption in the distribution network of data center park, which may cause the network congestion and voltage issues. The traditional methods to deal with these issues are expanding the power capacity or network reconfiguration, but the costs are relatively high. However, data center buildings with spatial-temporal flexible demand-side resources can be incentivized to operate in other time slots and regions, thus help alleviate the network congestion issues and support voltages. In this talk, Zhihao will propose an equilibrium optimization strategy based on distribution locational marginal prices and provide the solution method, which is a win-win solution for both entities in this model.

BIOGRAPHY

Zhihao Yang received his B.S. degree in electrical engineering and automation from Jiangsu University of Science and Technology, China in 2016 and the M.S. degree in power system and automation from Hohai University, China in 2019. He is currently working towards a Ph.D. degree in electrical engineering from Hohai University, China. His research interests include energy management, power system optimization and demand response.