

KIOS Distinguished Lecture in Memory of Prof. Elias Kyriakides



Prof. Nikos D. Hatziargyriou,
National Technical University of Athens, Greece

Monday, **16 October** 2023, at **11:30** | Amphitheatre **B108**

Microgrids Role in Future Energy Systems

LECTURE ABSTRACT

The definitions and main characteristics of Microgrids as building blocks of the future power systems will be introduced and their benefits and technical and commercial challenges will be presented. The various hierarchical levels and the technical control solutions proposed for the levels of their organization hierarchy will be described. Emphasis will be given to the capability of Microgrids with enhanced control capabilities to enhance the resilience of modern power systems and provide local supply restoration capabilities by coordinating local distributed resources. Finally, characteristic Microgrid installations over the world will be provided.

BRIEF BIO

Nikos D. Hatziargyriou (Life Fellow, IEEE) is with the National Technical University of Athens (NTUA), since 1984, Professor in Power Systems, since 1995, and Professor Emeritus, since 2022. He is Part-time Professor at the University of Vaasa, Finland. He has over 10 years of industrial experience as Chairman and the CEO of the Hellenic Distribution Network Operator (HEDNO) and as Executive Vice-Chair and Deputy CEO of the Public Power Corporation (PPC), responsible for the Transmission and Distribution Divisions.

He has participated in more than 60 R&D projects funded by the EU Commission, electric utilities and industry for fundamental research and practical applications. He has authored or coauthored more than 300 journal publications and 600 conference proceedings papers. He was the Chair and Vice-Chair of ETIP-SNET. He is past EiC of the IEEE Transactions on Power Systems and currently EiC-at-Large for IEEE PES Transactions. He is included in the 2016, 2017 and 2019 Thomson Reuters lists of top 1% most cited researchers. He is the 2020 Globe Energy Prize laureate, recipient of the 2017 IEEE/PES Prabha S. Kundur Power System Dynamics and Control Award and recipient of the 2023 IEEE Herman Halperin Electric Transmission and Distribution Award.

The KIOS CoE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 739551 and the government of the Republic of Cyprus through the Deputy Ministry of Research, Innovation, and Digital Policy. Complementary funding for the KIOS CoE is also provided by the University of Cyprus and Imperial College London.

