Yasser G. Hegazy

Yasser G. Hegazy, received the B.Sc. and M.Sc. degrees in electrical engineering from Ain shams University, Cairo, Egypt, in 1986 and 1990, respectively, and the Ph.D. degree in electrical engineering from the University of Waterloo, Waterloo, ON, Canada, in 1996.

Currently, he is a Professor of electrical engineering and the president of the German University in Cairo (GUC). Professor Hegazy has a solid international publication record in the fields of power system reliability, distributed generation, and power quality. He is a senior member of IEEE power and energy society and a reviewer of IEEE transactions in power systems, power delivery and energy conversion. Prof. Hegazy received the 2016 IEEE PES chapter outstanding Engineering Award and the 2004 State encouragement award in Engineering Sciences from the Egyptian academy for science and research.

Speech Title

Planning of Smart Grids

Abstract: With the integration of the new generation technologies and the advances in communication means, the traditional power grids are moving towards a new era and as a result, the planning and operational paradigms of traditional power systems need to be reshaped with a new prospective incorporating system uncertainties of emerging technologies and their interactions.

The smart grid technologies bring in new elements into in the system planning and operation including renewable energy sources and demand side management. The adaptation of smart grids encourages active consumer participation, accommodates all generation and energy storage options, and enables new products, services and markets.

The new and evolved challenges are required to be identified well in advance in order to ensure a secure, reliable and economic future with an evolving power grid. This talk highlights the planning and operational challenges in a smart grid environment.