



GRID MODERNIZATION: TECHNOLOGICAL ADVANCEMENTS BEYOND SMART GRID

John D. McDonald, P.E.

IEEE Life Fellow

Member of National Academy of Engineering CIGRE Honorary Member

25 August 2022, 2:30 p.m. https://tamu.zoom.us/s/98187956624

ABSTRACT:

This talk will familiarize participants with a vision for Grid Modernization, focusing on technological advancements beyond Smart Grid. The technological advancements include discussions of key industry/societal trends, Smart Grid concepts, holistic solutions, integration of microgrids and distributed generation, and Advanced Distribution Management System (ADMS) software applications. The talk will also cover feeder automation business models, managing different types of data, big data, analytics, enterprise data management, Smart Grid standards and interoperability, and Smart Grid deployments and lessons learned.

FOR MORE INFORMATION:

Dr. Haitham Abu-Rub <u>haitham.abu-rub@qatar.tamu.edu</u> +974 4423 0110 John D. McDonald, P.E., is Smart Grid Business Develop-ment Leader for GE's Grid Solutions business. John has 48 years of experience in the electric utility transmission and distribution industry. He received his B.S. and M.S. (power engineering) degrees from Purdue University, and an M.B.A. (finance) degree from the University of California, Berkeley. He is a Life Fellow of IEEE, and has received numerous awards, including the IEEE Millennium Medal, the IEEE Power & Energy Society (PES) Excellence in Power Distribution Engineering Award, the 2016 CIGRE Distinguished Member Award, the 2016 CIGRE USNC Attwood Associate Award, the 2021 CIGRE Honorary Member Award and the Smart Energy Consumer Collaborative (SECC) Lifetime Achievement Award. He is Past President of IEEE PES, VP for Technical Activities for the U.S. National Committee of CIGRE, Past Chair of the IEEE PES Substations Committee, IEEE Division VII Past Director, and a member of the National Academy of Engineering. He was on the Board of Governors of the IEEE-SA (Standards Association), is an IEEE Foundation Director, and is a Founding Board Member and Treasurer of the SECC. He received the 2009 Purdue University **Outstanding Electrical and Computer** Engineer Award and will receive the 2023 Purdue University Distinguished Engineering Alumni Award. He teaches Smart Grid courses at the Georgia Institute of Technology, for GE and for various IEEE PES local chapters as an IEEE PES Distinguished Lecturer. He has published 150 and articles, has coauthored five books and has one U.S. patent.