

Spring 2016 Distinguished Speaker Series

EVOLUTION OF CONTROL FOR THE POWER GRID

DR. ANJAN BOSE

Washington State University

FRIDAY MARCH 4, 2016

10:00 AM – HEC 101

As the electric power grid connects generators and loads that are geographically distributed, the monitoring and control of this system have always been a complex undertaking. In the early days the measurement and control signals were hard-wired from the control center to the substations. In the 60s, this hard-wired system was replaced with digital communications and computers. The continual advancement in communications and computation technologies have led to the complete overlaying of the power grid with a sophisticated information and communications technology (ICT) that can support layers of monitoring and control. This evolution of this smart grid now allows the interconnected power grids of today to span whole continents and at the same time control individual loads and distributed generation like solar and wind.



Dr. Anjan Bose is well known as a technical leader in the power grid control industry, a researcher in electric power engineering, an educator in engineering, and an administrator in higher education. Currently, he holds the endowed Distinguished Professorship in Power Engineering at Washington State University, and is the Site Director of the NSF sponsored Power System Engineering Research Center. He served as the Director of School of EECS and then Dean of the College of Engineering and Architecture. Before joining WSU, Dr. Bose was on the faculty of Arizona State University, where his research group became internationally known for applying computation technology to the control and analysis of large power grids.

Before ASU, Dr. Bose worked for Control Data Corporation in their Energy Management Systems Division (now Siemens Energy Management & Information Systems). Major breakthroughs in power system control technology under his leadership are industrial practice today. He has continued to be a technical leader in this industry and is a prominent consultant.

Dr. Anjan Bose received his BS in Electrical Engineering from Indian Institute of Technology, India in 1967 and his MS in EE from University of California, Berkley and his Ph.D. in EE from Iowa State University in 1974. Dr. Bose is a Member of the US National Academy of Engineering and has served on several NAE/NRC Committees. He is a Fellow of the IEEE and is active in several international professional societies.

