



Stanford University

TomKat Center for Sustainable Energy
Precourt Institute for Energy
Energy and Environment Affiliates Program
Civil and Environmental Engineering
Department of Electrical Engineering

Stanford SmartGrid Seminar

THE EVOLUTION OF CONTROL FOR THE SMART TRANSMISSION GRID

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1pm-2pm, Thursday, May 22nd, Y2E2 101

Abstract: The smart transmission grid is a major topic of discussion but a comprehensive description of such a grid is still developing. It is expected that such a transmission system will have significantly more measurements, communications and control than the present grid but no consensus has been reached on what the specifications of such new functionality should be. Matching the available technology of measurement, communication and control to our wish-list of applications is the way to develop this technical vision of the smart grid. In this presentation, we will develop a specific view of what the smart transmission grid will look like and what new monitoring and control functions will be feasible with existing technologies of measurements, communications, computers and controllers. The new development will be mainly in software which will be covered.

Bio: Anjan Bose received his B.Tech. from IIT, Kharagpur, M.S. from Univ. of Calif, Berkeley, and Ph.D. from Iowa State Univ. He has worked for industry, academe and government for 40 years in electric power engineering. He is a Regents Professor and holds the endowed Distinguished Professorship in Power Engineering at Washington State University, where he also served as the Dean of the College of Engineering & Architecture 1998-2005. He has served as a consultant and advisor to utilities and governments on grid issues. He served as a Senior Advisor to the Undersecretary at the US Department of Energy for 18 months. Dr. Bose is a Member of the US National Academy of Engineering, a Foreign Fellow of the Indian National Academy of Engineering and Fellow of the IEEE.