

Computer Science Seminar Series, 2009

National Capital Region

Smart Grid as the Enabler for a Sustainable Energy Solution

Speaker: Prof. Manisa Pipattanasomporn
Department of Electrical and Computer Engineering
Virginia Tech

Friday, November 20, 2009
1:00PM- 2:00PM, NVC 325

Abstract

The focus of this talk is to discuss what a smart grid is, and what is needed to make it a reality. The presentation will cover a broad range of smart grid technologies at the transmission, distribution, and customer levels. Particular focus will be given to advanced components and integrated communications that enable smart grid functions at the customer level - including for example distributed energy resources, advanced metering infrastructure, demand response and smart appliances. The talk will also summarize on-going smart grid-related research activities at Virginia Tech → Advanced Research Institute, and discuss how Smart Grid can provide a platform for research collaboration among various departments at Virginia Tech.

Biography

Manisa Pipattanasomporn joined Virginia Tech's Department of Electrical and Computer Engineering as an assistant professor in 2006. She received her Ph.D. in electrical engineering from Virginia Tech in 2004. She received the M.S. degree in Energy Economics and Planning from Asian Institute of Technology (AIT), Thailand in 2001 and a B.S. degree from the Electrical Engineering Department, Faculty of Engineering, Chulalongkorn University, Thailand in 1999. She currently serves as the PI/co-PI of three smart grid-related research grants from National Science Foundation (NSF), Department of Energy (DOE) and Department of Defense (DOD). Her fields of interest are renewable energy systems, distributed energy resources and critical infrastructures.