

WELCOMES YOU TO ATTEND THE PRESENTATION ON:
Smart Grid Communication: Technologies, Challenges and Requirements

Date: **Wednesday, May 18, 2016**

Time:

6:30 PM – Pizza + Social Networking
7:00 PM – Presentation

Location:

Jacaranda Hall Room 4440
College of Engineering & Computer Science
California State University, Northridge
18111 Nordhoff Street
Northridge, CA 91330

No Fee: Free pizza and light refreshments
from 6:30 PM

RSVP at Sedghisigarchi.eventbrite.com
by May 16, 2016 for food/drink count

Information: Mr. Ron Olch, Chapter Chair at
ronald.h.olch@ieee.org

Speaker: Dr. Kourosh Sedghisigarchi



**Professor of Electrical & Computer
Engineering
Cal State University, Northridge**

Abstract

The smart grid is mainly composed of six basic systems: power generation system, distribution system, transmission network, data management and processing system, smart metering system, and customer information system. The architecture of communication technologies of the upcoming smart grid is yet to be defined. Thus, we are going to challenge different communication technologies. For instance, Wideband Communication Systems (UWB) and Bluetooth as a short-range wireless communication technology are suitable for communication between metering modules and end customer device. This presentation provides an overview of smart grid communication technologies. Motivation and vision of the smart grid will be explained. Smart grid communication requirements and architectures will be explained in detail. Also, Smart grid challenges are studied and presented. Finally, five major communication technologies will be presented in detail and compared.

Speaker Biography

Kourosh is a full time faculty member in the Electrical and Computer Engineering Department of California State University, Northridge (CSUN). His main field of interest includes advanced power systems, smart-grid and micro-grid systems, renewable energy systems, energy storage systems, and Distributed Energy Generation. Kourosh is the recipient of outstanding Engineering Merit Award in 2013. Kourosh is a senior IEEE member and has served as IEEE IAS San Fernando valley Chapter, IEEE WV Section and WVUIT IEEE Student Branch Advisor.

Kourosh has received his B.Sc and M.Sc in Electrical Engineering from Sharif University of technology. Kourosh earned his Ph.D degree in Electrical Engineering from West Virginia University in May 2004. His dissertation extended the modeling, stability analysis and control aspects of a solid oxide fuel cell as a distributed generator.