



IEEE

**IEEE Control Systems Society, HKN Epsilon
Alpha Chapter, and IEEE Student Branch at
Cleveland State University jointly present**

Cleveland Section

Controlling, Electrically, the World's Largest Systems

Dr. Allen G. Morinec

FirstEnergy Corporation, Cleveland, OH

Date and time

**Friday, Apr. 12, 2013
3:00pm-5:00pm**

Location

**Stilwell Hall 103
Fenn College of Engineering
Cleveland State University
1960 East 24th Street
Cleveland, OH 44115**

Agenda

**3:00-3:30: social hour
3:30-4:30: seminar
4:30-5:00: Q&A**

Who is invited?

**Anyone interested in attending
Priority will be given to
members of IEEE Control
Systems Society**

CPD

**One credit available
Bring your flyer for credit.**



Dr. Allen G. Morinec, P.E., has worked at FirstEnergy Corp. since 1986 where he is a Supervisor in the Transmission and Substation Services Department. His fields of interest include Substation Test & Commissioning, Power System Protection, Industrial & Commercial Power Systems, and the National Electrical Code.

Abstract of the seminar: The Electric Power System is one of the world's largest systems. In 2011, The U.S. electric system had 1.05 Million Megawatts of Generation Capacity and 334 Million Customers. Controlling the electric system is a daunting task. The control systems for generation, transmission, and distribution systems will be presented and discussed. Control Systems such as Automatic Generation Control, Automatic Load Frequency Control, Automatic Voltage Regulation, Power Flow, Area Control Error, and Volt-Var Control will be included. Stability and emergency control of the electric system during power system disturbances and system state transition will be presented along with some techniques such as UF & UV Load Shedding, Power System Stabilizers, and some technologies such as Synchronous Condensers & FACTS devices.

Refreshment and soft drink will be provided!

RSVP: Dr. Lili Dong • L.Dong34@csuohio • 216-687-5312

This is to certify that _____ attended this seminar.
Certified by _____. Certificates of attendance and
other evidence of CPD activity should be retained by the attendee for
auditing purposes."