

Monday November 16, 2015, 8 am-5 pm
EPRC Short Course in Protective Relaying for electric power systems.

Synopsis: This is a one-day basic course on protective relays for electric power systems. The science and skill of protective relaying is fundamental to ensuring high reliability in the operation of the distribution, transmission and generation systems.

The course will be taught by Tim Ernst, P.E., a practicing expert in the field.

Who Should Attend: The course is designed for relay technicians and engineers who need basic or refresher education and training in protective relaying for electric power systems. The course will benefit personnel of all levels of experience because it covers a range of complexity of relay schemes, methods of testing relays and of analyzing relay operations.

Continuing Education Units (CEUs). EPRC has applied to Iowa State University for 0.8 CEUs (8 PDH) for attending the course and participating in the group exercises in class.

Tim Ernst of P & E Engineering will present relay theory and operation of the older electromechanical as well as the modern digital types, covering many types of functions such as overcurrent, over voltage, impedance and differential. His presentation will include topics such as fault current basics and application of fuses and reclosers on distribution circuits and circuit breakers and instrument transformers in substations on distribution or transmission circuits or lines.

Tim is an electrical engineer with 23 years of utility and consulting engineering experience. He holds B.S.E.E. and M.S.E.E. degrees from Iowa State University with emphasis in power systems and control systems. Tim specializes in power system protection and various types of power system analysis including electromagnetic transient analysis utilizing the EMTP program. He has extensive experience designing relay and control systems for distribution and high voltage transmission substations. Tim also has significant experience performing commissioning testing of substation and generator facilities.

Where: Instruction will be offered in Iowa State University's Coover Hall (home to the Electrical and Computer Engineering Department) classroom 3041/3043.

When: Monday November 16 from 8 am to 5 pm

Cost: If you register by October 27, the registration cost will be \$400 per utility attendee. After October 27, registration will be \$500 per attendee. NOTE: EPRC members receive a 10% discount. The cost includes instruction, morning and afternoon breaks and lunch.

How to register: complete registration form online or Please contact Barbara Brown (515 294 8057) or barbarab@iastate.edu with questions