SCHWEITZER ENGINEERING LABORATORIES (SEL) SEMINAR ON DISTANCE PROTECTION

Title: ***Distance Protection: Why Have We Started With a Circle, Does It Matter, and What Else Is Out There?***

The IEEE Columbus Power and Energy Society (PES) presents a seminar on transmission system distance protection, hosted by Schweitzer Engineering Laboratories (SEL) in Lewis Center. One hour of P.E. credit will be provided to attendees. Please RSVP, as the event is limited to 30 attendees.

Event Description: We look back at the history of distance protection, explain the first principles, and discuss why our industry settled on designs we know and appreciate today. We look at why, after a century of refinements, a typical distance element still uses heavily filtered voltages and currents and operates on the order of one power cycle. In the second part of the presentation, we explain the principles of time-domain distance protection based on incremental quantities, and operating by processing samples of voltages and currents without band-pass filtering to retrieve phasors. We discuss various choices for a time-domain distance element and present test results and field cases of an implementation with operating times of just a few milliseconds. In the third part of the presentation, we discuss the feasibility of a distance element based on traveling waves and operating even faster.

Speaker: Zachary T. Summerford, P.E. of SEL

Date & Time: March 19, 2018 6:00-6:30 for light dinner; 6:30-7:30 for presentation and Q&A

Location: 9054 Cotter Street, #509, Lewis Center, OH 43035 (SEL office)

Registration: RSVP to Jerod Marker, PES Chair, at jrmarker@gmail.com . Attendance limited to 30.