

IEEE Jackson PES Meeting



Date: July 23, 2014

Time: 12:30pm – 1:30pm

Location: Entergy Transmission Headquarters, 6540 Watkins Dr. Jackson, MS

PDH: 1 Contact Hour

Cost: Attendance free. Bring your own lunch

RSVP: Respond to Jeremy Blair by July 21, 2014 via email to jeremy_blair@selinc.com

Topic: BIL: Improving Lightning Performance on Distribution Feeders

Presenter: J. David Taylor, P.E., Entergy Services, Inc.



Abstract:

Lightning related outages are common on distribution systems and are generally accepted as unavoidable. The intent of this presentation is to show that lightning related outages can be minimized by simply increasing the BIL of the distribution system. While most lightning mitigation techniques attack lightning from the primary conductor side of the equation, this technique minimizes the issue from the "ground" up. Using a simplified model of BIL, it will be demonstrated that greater than 300 kV BIL can be achieved, in fact, in many cases, greater than 400 kV BIL is easily achieved. We will investigate simple but effective ways of increasing BIL on each pole, not by changing design, but by moving "ground" wires, installing Guy Strain Insulators, and if needed, by insulating the ground wire in the primary zone.

Biography:

J. David Taylor graduated from Mississippi State University and began working for Mississippi Power and Light as a field engineer in 1985 and was licensed as a Profession Engineer in 1993. David has 28 years of experience in Distribution Design, Distribution Planning, and Distribution System Protection. David's work with Entergy has culminated in an inspection based program that improves system SAIFI by ensuring a minimum BIL of 300 kV on Entergy's worst performing circuits.





