



## IEEE Jackson PES Meeting



**Date:** February 13, 2012  
**Time:** 12:00 pm - 1:00 pm  
**Location:** Entergy Transmission HQ Cafetorium  
6540 Watkins Drive  
Jackson, MS 39213

**PDH:** 1 Contact Hour  
**Cost:** Everyone is responsible for their own meal. Bring your own or purchase at Cafeteria.  
**RSVP:** Required to Jeremy Blair by February 12, 2012 at [jblair@entergy.com](mailto:jblair@entergy.com)

**Topic:** **Cyber Security Considerations for Electric Power Systems**

**Speaker:** Dr. Tommy Morris

### Abstract:

Electric power system reliability is critical to the economic health of all industrialized nations. Electric transmission systems increasingly use networked computers and intelligent electronic devices for substation automation, automated control algorithms, and wide area monitoring systems. These networked devices are threatened by internal and external cyber attacks which can be grouped in four categories reconnaissance, denial of service, response injection, and command injection. This talk will review the threats to electric power systems and discuss intrusion detection system research intended to alert power system operators of ongoing cyber attacks.

### Biography:

**Dr. Thomas Morris** received his Ph.D. in Computer Engineering at Southern Methodist University in Dallas, TX with a research emphasis in cyber security. Dr. Morris joined the department of Electrical and Computer Engineering at Mississippi State University (MSU) in 2008 as an assistant professor. He currently serves as director of the MSU Critical Infrastructure Protection Center (CIPC) and is a member of the MSU Center for Computer Security Research (CCSR). His primary research interests include cyber security for industrial control systems and electric utilities and power system protective relaying. His recent research outcomes include vulnerability and exploit taxonomies, intrusion detection systems, virtual test beds, and a relay setting automation program used by a top 20 investor owned utility. He has authored 33 peer reviewed research conference and journal articles in these areas. Dr. Morris's research projects are funded by the Department of Homeland Security, Oak Ridge National Laboratories, NASA, the US Army Corps of Engineers Engineering Research Development Center (ERDC), Pacific Gas and Electric Corporation, and Entergy Corporation. Prior to joining MSU, Dr. Morris worked at Texas Instruments (TI) for 17 years in multiple roles including circuit design and verification engineer, applications engineer, team leader, and program manager.



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