

# Power Systems Cybersecurity: Why, what are we missing, and when is it enough?

*Presented by Nathan Wallace, PhD, CSSA*

**Date:**

**September 19, 2016  
(Monday)**

**Time:**

**11:30am to 12:30pm  
Lunch included**

**Location:**

**Rm 2302, Entergy Building  
639 Loyola Ave  
New Orleans**

**Cost:**

**FREE for PES members  
\$10 for non members**

**PDH:**

**One PDH certified by IEEE**

**RSVP**

**<http://goo.gl/WCPp9F>**

**Questions?**

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## ABSTRACT

From turbine to toaster, the US electrical grid is evolving. Increases in distributed generation, battery storage, advanced metering, and automation results in a growing dependency on computational and communication technology. With engineers and technicians historically focused only on the physical infrastructure, there is an increased need to bring that same focus and understanding to the grid's supporting cyber infrastructure. By first examining the multitude of cyber threats and then following that with current NERC-CIP measures, this talk explores the question: is more security needed and if so how would it be implemented.

## BIOGRAPHY

Nathan Wallace has B.S. degrees in Electrical Engineering and Physics, an M.S. in Engineering, and a Ph.D. in Engineering Cyberspace from Louisiana Tech University. He started his career as an Electrical Engineering intern with Entergy's Relay Settings and Configuration group and then joined an electric utility as an Associate Engineer performing field maintenance of system protection and SCADA equipment. After seeing the grid's growing reliance on cyber technologies, he pursued a graduate degree focusing on power systems cybersecurity where he also worked as a digital forensics investigator. Afterwards, Nathan joined Ampirical as a Staff Engineer and is the Director of Cyber Operations for Ampirical's sister company, Cybirical. As the Director of Cyber Operations, he is responsible for assisting clients with assessing potential cyber security risks. He also leads the design and setup of Ampirical's relay protection training lab and assists with the commissioning of SCADA, relay protection, and communication equipment.

