ELECTRICAL AND COMPUTER ENGINEERING SEMINAR SERIES: SPRING 2011

ONE-DAY WORKSHOP: "Introduction to Renewable Energy"

by

Dr. Paul A. Dolloff
Power and Energy Institute of Kentucky
Department of Electrical & Computer Engineering
University of Kentucky
Lexington, KY

LOCATION: 3rd floor conference room in the new Electrical Engineering Building
DATE OF SEMINAR: April 25 (Monday), 2011

ABSTRACT:

This workshop is an overview of renewable energy technologies outlining the basic principles of solar, wind, and micro-hydro electricity generation and applications.

Topics:

- Fact from Fiction
- Net Metering and Co-Generation
- Solar Energy
- Sizing PV
- PV Example 1
- PV Example 2
- Wind Energy
- Wind Example
- Solar Hot Water
- Micro Hydro
- IEEE Std. 1547

SHORT BIO OF THE PRESENTER:

Paul Dolloff joined East Kentucky Power Cooperative in 1996 and is currently a senior engineer in the Research and Development department. In 2004 Paul was appointed an Adjunct Faculty position in the ECE department at the University of Kentucky where he teaches graduate level power engineering courses, directs graduate student research, and serves as advisor for senior design teams. Paul is a senior member of the IEEE and was a member of the IEEE working group that wrote the IEEE Std. 1547, "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems." Recently, Paul has served on Merit Review Committees

providing technical review of proposals in the renewable energy sector for Federal ARRA (Stimulus) money for the U.S. Department of Energy. Dr. Dolloff received a BS in EE from Tennessee Tech University, MS and Ph.D degrees in EE from Virginia Tech University, and an MBA from Morehead State University.

Tentative Agenda

8:30 – 9:00 am	Registration and continental breakfast
9:00 – 10:00 am	Fact from Fiction Net Metering and Co-Generation
10:00 – 10:15 am	Break
10:15 – 12:00 pm	Solar Energy Sizing PV PV Example 1 PV Example 2
12:00 – 1:00 pm	Lunch
1:00 – 3:00 pm	Wind Energy Wind Example Solar Hot Water
3:00 – 3:15 pm	Break
3:15 – 5:00 pm	Micro Hydro IEEE Std. 1547
5:00 pm	Adjourn