

IEEE Toledo Section Technical Program

**Power & Energy Society
Industrial Applications Society
Computer / Control Systems Society
Young Professionals Affinity Group**

AEP Volt-Var Optimization Deployment

Date: Tuesday, March 11th, 2014

Social Time: 5:30 PM – 6:00 PM

Buffet Dinner: 6:00 PM – 6:45 PM

Program: 6:45 PM – 8:00 PM

Location: Electrical Industries Building (TECA Office Building)
727 Lime City Road, Rossford, Ohio 43460

Cost: \$10 for Lasagna and Stuffed Chicken Breast Dinner
Soft drinks provided

Abstract: American Electric Power Operating Companies have installed Volt VAR Optimization (VVO) on 60 circuits. VVO utilizes technology and communications to supply voltages to customers that more closely match the design voltages of the customer equipment. Energy consumption reductions averaging 3%+ are being achieved. VVO is now being recognized as a highly cost effective Energy Efficiency Program with Indiana and Michigan Public Service Commissions recently approving VVO as an Energy Efficiency Program. This presentation will discuss the principles of VVO, the technology deployed, results of energy consumption reduction achieved, and some key distribution engineering factors that impact the performance of VVO systems.

Presenters: Mr. Paul R. Thomas, P.E.
Mr. Thomas F. Weaver III, P.E.

Paul Thomas is the American Electric Power Grid Management Deployment Supervisor and previously was the AEP Ohio Project Manager for Integrated Volt Var Control, Distribution Automation and Community Energy Storage. Mr. Thomas helped co-author the AEP Ohio gridSMART® Demonstration Project in 2009 which was awarded \$75 Million in DOE funding for the highest scoring Midwest proposal. Since 2007 Mr. Thomas has supported the development of AEP gridSMART® processes and roadmaps. Mr. Thomas was highly involved in the AEP Distribution Monitoring System

which continues to evolve from manual data collection to collection via SCADA. Mr. Thomas helped develop the Transformer Monitoring and Diagnostics System for distribution station transformers allowing for the continuous monitoring of station transformer health via SCADA. During 29+ years at AEP, previous assignments included Distribution Field Engineering, Distribution Asset Planning and Distribution Asset/System Planning Supervision. Mr. Thomas received a Bachelor of Science degree in Electrical Engineering from the University of Toledo, member of the National Society of Professional Engineers, member of the Ohio Society of Professional Engineers, member of IEEE and a registered Professional Engineer in the State of Ohio.

All attendees will be awarded 1.0 P.D.H.

Please RSVP by 5:00 PM Wednesday, March 5th, 2014 using the on line reservation form on the IEEE Toledo Section Website, or by contacting Steve Root at:

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