Workshop on Microgrid Systems and Power Electronics for Low Energy Buildings
March 29-30, 2015
University of Illinois at Urbana-Champaign
3002 Electrical and Computer Engineering Building, 406 N. Wright St., Urbana, IL 61801 USA

The 2015 Workshop on Microgrid Systems and Power Electronics for Low Energy Buildings brings together renewable energy systems and their integration into electricity grids and buildings. The workshop is sponsored by the Mid-America Microgrid Education and Training Consortium (MARMET), the Power Sources Manufacturers Association (PSMA), the IEEE Power Electronics Society Emerging Technologies Technical Committee, the IEEE Central Illinois Section, and the IEEE joint student chapter on power electronics and power and energy systems. The workshop will be held at the new Electrical and Computer Engineering Buildings (ECEB) at the University of Illinois, a facility designed to achieve LEED Platinum status and ultimately net-zero energy performance. The workshop format mixes invited presentations, submitted papers, discussion sessions, and small-group discussions. The new ECEB will also be presented.

Schedule:
(4:00pm Sunday, March 29, 2015 MARMET operating committee meeting, by invitation only, room 5070 ECEB)
6:00pm Sunday, March 29, 2015 Reception and networking, 3002 ECEB
8:00am Monday, March 30, 2015 Continental breakfast, 3002 ECEB
8:30am-4:30pm Monday Paper presentations and discussion sessions
  8:30-9:00 A Low-Energy “Living Laboratory” Building for Electrical and Computer Engineering
  9:00-9:30 Power Grid Stability: The Perils and Potential of Power Electronic Loads
  9:30-10:00 A Summary of Iowa’s Recent Inquiry into Distributed Generation
  10:00-10:20 Discussion
  10:20-10:35 Break
  10:35-11:05 Grid Energy Storage Services and Benefits
  11:05-11:35 Storing Thermal Energy to Maximize Renewables and Minimize Randomness
  11:35-11:55 Discussion
12:00pm-1:00pm Workshop buffet luncheon
  1:00-1:30 The Effects of Regulatory and Utility Policy on the Lifecycle Valuation of Solar PV
  1:30-2:00 Fast Modeling of Solar Costs and Sensitivity
  2:00-2:30 Fast Local Voltage Control Under Limited Reactive Power
  2:30-2:50 Discussion
  2:50-3:05 Break
  3:05-3:35 A 13.8-kV 4.75-MVA Microgrid Laboratory Test Bed
  3:35-4:05 Case Study of Missouri S &T Solar Village Microgrid - Lessons Learned
  4:05-4:25 Discussion
4:30-5:45pm Monday ECEB tour
6:00-8:30pm Monday Reception and banquet, concluding remarks

Registration levels (covers meals and conference materials), on-site or after March 17, 2015:
MARMET/PSMA/IEEE members and MARMET participating companies: $250 per person
MARMET/IEEE student members and IEEE life members: $125 per person
Non-members: $350 per person

Web: http://marmet-center.org/