



Power Systems Engineering Research Center

Celebrating PSERC's First Decade

Industrial Advisory Board Meeting

May 31 – June 2, 2006

Madison, Wisconsin

Wednesday, May 31 (Tong Auditorium, Engineering Centers Building)

- 1:00 – 2:45 p.m. **Optional Guided Tours** of Engine Research Lab (1:00-1:45, meet at “student statue” in front of Engineering Hall at 1:00), Power Electronics Lab and HSX Plasma Research Lab (both in Engineering Hall, concurrent 30 minute tours beginning at 1:45 and 2:15 p.m. so you can attend both tours; meet at the “student statue” in front of Engineering Hall)
- 3:00 - 3:45 **PSERC Orientation**
- 3:45 - 5:00 **Systems Stem Committee Meeting**
- 5:00 - 6:15 **T&D Technologies Stem Committee Meeting**
- 6:15 - 7:30 **Reception**
- 7:30 – 8:45 **Markets Stem Committee Meeting**

Thursday, June 1 (Tong Auditorium, Engineering Centers Building)

- 7:30 - 8:00 a.m. **Registration and Continental Breakfast**
- 8:00 - 8:20 **Celebrating PSERC's First Decade**
Vijay Vittal, PSERC Director, Arizona State University
- 8:20 - 8:40 **PSERC as a Collaboratory: What We've Learned**
Robert J. Thomas, Cornell University
- 8:40 – 8:50 **Keys to Success of Industry-University Research Centers**
Alex Schwarzkopf, IUCRC Program Director, National Science Foundation
- 8:50 - 9:10 **Markets Research: What We've Learned**
Shmuel Oren, University of California at Berkeley
- 9:10 - 9:30 **T&D Technologies Research: What We've Learned**
Mladen Kezunovic, Texas A&M University
- 9:30 – 9:50 **System Research: What We've Learned**
James McCalley, Iowa State University
- 9:50 - 10:10 **Break**
- 10:10 – 10:30 **Synergies of Research and Education in Addressing Pressing Energy Issues**
Chancellor John Wiley, University of Wisconsin-Madison

Thursday, June 1 (Tong Auditorium, Engineering Centers Building)

- 10:30 - 11:30 **Student Presentations**
Planning Reconfigurable Reactive Control for Transmission Enhancement
Haifeng Liu, Iowa State University
Economic Evaluation of Reliability for Electricity Markets with Demand-Side Bidding and Financial Market Participants
Teoman Guler, University of Illinois at Urbana-Champaign
A Unified Power Conditioning Architecture for Voltage Sag Tolerance for Wind Turbines Using Doubly Fed Induction Generators
Patrick Flannery, University of Wisconsin-Madison
Vijay Vittal, Moderator
- 11:30 – 12:00 **Future Technical Talent Needs in the Electric Power Industry**
Wanda Reder, VP, Power System Services, S&C Electric Co.
- 12:00 - 1:15 **Lunch and Conversation with Thomas Edison (Engineering Hall)**
- 1:15 - 2:15 p.m. **Industry Education and Research Challenges in PSERC's Second Decade**
Lawrence Jones, Manager, Utilities Practice and Strategic Initiatives, AREVA T&D
Peter Sauer, University of Illinois at Urbana-Champaign
Robert J. Thomas, Cornell University
Raymond Vice, Consulting Engineer, Southern Co.
Moderator: Gerry Heydt, Arizona State University
- 2:15 - 3:45 **Poster Session** with Discussions on On-Going Projects
- 3:45 - 5:30 **Closed IAB Meeting**
- 6:30 - 8:30 **Reception/Dinner:** University Club

Friday, June 2 (Tong Auditorium, Engineering Centers Building)

- 7:30 - 8:00 a.m. **Continental Breakfast**
- 8:00 - 8:30 **Feedback from IAB Business Meeting**
- 8:30 - 9:00 **Automated Integration of Condition Monitoring with an Optimized Maintenance Scheduler for Circuit Breakers and Power Transformers**
Jim McCalley, Iowa State University
- 9:00 - 9:30 **Research on Cybersecurity in Power Systems**
Peter Sauer, University of Illinois at Urbana-Champaign
- 9:30 - 10:00 **Satellite Imaging for Vegetation Control**
Jerry Heydt and George Karady, Arizona State University
- 10:00 - 10:30 **Microgrid Research Directions**
Robert Lasseter, University of Wisconsin-Madison
- 10:30 **IAB Meeting Adjourns**
- 11:00-12:30 **Executive Committee Meeting**