

Center for Power Systems Studies
Spring Meeting – Huron, SD
COORDINATOR'S REPORT
April 24, 2008

To: Members of Center for Power Systems Studies
Associate Members of Power Systems Studies
All those in attendance at meeting

We are now at the close the Center for Power Systems Studies' 40th year of operation. The following is a summary of the last several months of activity within the department of Electrical Engineering and Computer Science that is related to the CPSS.

I. Teaching activities during spring 2008 term

Steve Hietpas

- a. EE315 (3 cr) *Linear Controls*, 21 students.
- b. EE221 (3 cr) *Circuits II*, 18 students.
- c. EE221L (1 cr) *Circuits II Lab*, 18 students.

Mike Ropp

- a. EE436/536 (3 cr) *Hybrid PV Power Systems*, 11 students.

II. Other Activities During Spring Semester

Steve Hietpas

- b. Held planning meeting with conference committee in preparation for 2008 CPSS Regional Power Conference.
- c. Serve on the board for the SDEC.
- d. Reviewed papers for IEEE Transactions on Education, IEEE, REPC, IEE, and ASEE.
- e. Advised two graduate students in the area of motor drives using FPGAs
- f. Advised one graduate student in the area of fault location for distribution systems.
- g. Undergraduate program coordinator for electrical engineering

Mike Ropp

- a. Became a balloting member of the IEEE-1547 Standard committee. Now working on 1547.2 and 1547.4
- b. Working on our fourth PV in the Parks Project, co-sponsored by Heartland Consumers Power District. This year we will do a ~7.5 kW DC grid-tie system in Volcanoes NP where their residential electric rate is pushing toward \$0.40/kWh. We hope to take ten students on that trip, depending on what airfares do (two major Hawaiian airlines, Aloha and ATA, liquidated their fleets over the past two weeks!)
- c. Was awarded an Xcel RDF grant, with work to start in January 2009.
- d. Submitted five papers to the IEEE Photovoltaic Specialists Conference (May 2008 in San Diego), two to the IEEE Power Engineering Society general meeting (July 2008 in Pittsburgh), and one to the *IEEE Transactions on Energy Conversion*.
- e. Collaborated on a proposal to fund work at SDSU on microgrids, power system controls, and integration of distributed resources into power systems, with Radiance Technologies Inc. If awarded, funding will come from the DoD. One part of this project will be to build a power system testbed facility at SDSU that can be used for power system research and training.

Center for Power Systems Studies
 Spring Meeting – Huron, SD
 COORDINATOR'S REPORT
 April 24, 2008

III. Scholarship Activity

Recipients for Fall 07 and Spring 08

Seniors	Juniors	Sophomore	Freshmen
Lowell Dolney*	Corey Kramer		
Trevor Howard	Todd Bockorny		
Christopher Graff	Tyler Wulf		
Derek Bryant	Aric Lowe		
Matthew Tesch	Seth McGill		
Chris Mouw	Derrick Galinat		

* Indicates recipient of the \$3000 Center for Power Systems Studies Award

IV. Status of Power Students

a. Power Graduates Update

Student	Graduation Semester	Place of Employment
Patrick Cisar	Fall 07	Larson Binkley, Overland Park, KS
Lowell Dolney	Fall 07	NPPD
Russell Halgerson	Fall 07	Peoples Cooperative Services
Molly Houck	Fall 07	WAPA
Trevor Howard	Fall 07	WAPA
Ryan Jensen	Fall 07	NPPD
Derek Bryant	Spring 2008	NPPD
Aaron Giddings	Spring 2008	ABB
Matthew Tesch	Spring 2008	Ulteig Engineers (Fargo)

Of 17 students that are graduating spring 2008, 3 declared power as their career choice, which is 18% of the graduating seniors. Since the spring of 2000 to present, 43 of 220 (approximately 20%) of SDSU EE graduates either obtained or have pursued a career in power.

b. Summer Positions, Engineering Internships, or Cooperatives

Student	Summer Place of Employment	Expected Graduation
Chris Graff	No plans this summer	Fall 2008
Steve Grantz	Patrick Energy Services (Chicago, IL)	Fall 2008
Kirby Wicks	Malloy Electric	Spring 2009
Derrick Galinat	Daktronics (possibly Interstates)	Spring 2009
Seth McGill	Daktronics (past experiences with Tendair Industries)	Spring 2009
Tyler Wulf	Raven Industries (Sioux Falls)	Spring 2009
Todd Bockorny	DGR	Spring 2009
Aric Lowe	Power Engineers (Billings)	Spring 2009

Center for Power Systems Studies
Spring Meeting – Huron, SD
COORDINATOR'S REPORT
April 24, 2008

Jon Aus	ECI (Billings)	Spring 2009
Jay Groninger	Augusta Systems (Sioux Falls)	Spring 2009
Eric Boese	Sencore	Spring 2009
Brady Nesvold	Monticello Nuclear Power Plant, Xcel Energy	Spring 2009
Joshua Cahill	Daktronics	Spring 2009
Corey Kramer	Sanford Health System (Sioux Falls)	Fall 2009
Steve Cozine	Cozine Electric	Spring 2010
Tyler Duffy	Daktronics	Spring 2010
Joseph Dold	Larsons (Brookings)	Spring 2010
Matthew Bult	MRES	Spring 2011
Fistum Mekuria	uncertain	Spring 2011

V. Summer Activity

Steve Hietpas

1. Supervise three graduate students
2. Program Coordinator for EE program in June and July.
3. Work with conference committee to finalize details for the 2008 Regional Power Conference
4. Revise Electromechanical Systems notes to help integrate new motor drive into corresponding lab component
5. Attend an ONR/EPRI Workshop on Electric Drives and Power Systems, Flagstaff, AZ, first week of July

Michael Ropp

1. Wind Resource Assessment Network
2. Supervise five graduate students on various projects
3. NSF- EPSCoR
4. NSF-CAREER
5. Will be taking 8-10 students to Volcanoes National Park in HI to installed PV system.

Respectfully submitted,

Steven M. Hietpas, Ph.D., P.E.
Coordinator, Center for Power Systems Studies
Professor of Electrical Engineering