

Center for Power Systems Studies  
Semiannual Meeting – Madison, SD  
COORDINATOR'S REPORT  
April 20, 2006

---

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' 38<sup>th</sup> 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 2006 term

a. Courses taught spring semester

Steve Hietpas

1. EE221 (3 cr) *Circuits II*, 18 students, ~ 4/18 students look interested in power careers.
2. EE292 (1 cr) *EE Tools*, 16 Students (this class complements with EE221).
3. EE315 (3 cr) *Linear Controls*, 21 students.

Mike Ropp

1. EE260 (3 cr) – *Materials*, 23 undergraduate students
2. EE492 (3 cr) – *Hybrid Photovoltaic Power Systems*, 20 undergraduate and 5 graduate students

II. Scholarly/research activities

Steve Hietpas

1. Passed the PE exam in the fall of 2005.
2. Attended and chaired a panel discussion on motor drives at the NSF workshop on teaching Power Systems Analysis (UofM, Ned Mohan) – February of 2006.
3. Served on the paper review committee for IEEE Rural Electric Power Conference. Reviewed papers for the upcoming 2006 conference.
4. Served on the review committee of IEEE Transactions on Industrial Applications associated with the Rural Electric Power Conference.
5. Advised two graduate students on design papers and research/scholarly related activity involving: DC 4-quadrant motor drive, AC-AC Converter, design of a 3-hp V/Hz 3-phase Induction Motor Drive using a dSPACE rapid-prototype system.

Mike Ropp

1. NSF-CAREER projects over the next four years.
2. Organized the photovoltaics parks project to Alaska
3. Continued four power-related graduate student projects (renewable energy topics).
4. Continued to operate the Wind Resource Assessment Network.
5. Attended numerous conferences and published several papers
6. Actively involved in the EPSCOR Proposal process for SDSU and the State of SD

Center for Power Systems Studies  
Semiannual Meeting – Madison, SD  
COORDINATOR'S REPORT  
April 20, 2006

---

III. Scholarship Activity

Freshmen level (less than approximately 50 credits completed)  
Sophomore level (less than approximately 80 credits completed)  
Junior level (less than approximately 110 credits completed)

Recipients for spring 06

Seniors	Juniors	Sophomore	Freshmen
Wes Wingen	Derek Bryant	Corey Kramer	Eric Boese
Tanner Knecht	James Galipeau	Lowell Dolney	
Doug Larson	Jack Winter	Michael Winne	
Dustin Schutz	Austin Hoekman*		
	Molly Houck		
	Trevor Howard		

\* Indicates recipient of the \$3000 Center for Power Systems Studies Award for 2005-2006 year

Recipients for fall 06

Seniors	Juniors	Sophomore	Freshmen
Jack Winter	Austin Hoekman*	Corey Kramer	
	Daniel Lewis-Coomes		
	Molly Houck		
	Trevor Howard		
	Derek Bryant		

\* Indicates recipient of the \$3000 Center for Power System Studies Award for 2006-2007 year

Center for Power Systems Studies  
Semiannual Meeting – Madison, SD  
COORDINATOR'S REPORT  
April 20, 2006

---

IV. Power Student Status (Fall 2005 thru Summer 2006)

<b>Student</b>	<b>Est. Grad. Date</b>	<b>Place of Employment</b>
Jay Tolle	Graduated S05	Cannon Technologies, Sioux City
Daniel McMahon	Graduated F05	DGR, IA
Brian Bigge	Graduated F05	NorthWestern Energy, Huron
Santosh Bhattarai	Su06	ECI, Billings, MT
Wes Wingen	S06	Black Hills Power, SD
Jerad Johansen	S06	Interviewing Process
Doug Larson	S06	Interviewing Process
Jay Munsch	S06	Interviewing Process
Jack Winter	F06	WAPA, Huron
Tanner Knecht	F06	MidAmerican Energy, Council Bluffs Energy Center
James Galipeau	S07	Center for Advanced Applications on the Nano Scale, SDSU
Austin Hoekman	S07	Searching for Intern Position
Lowell Dolney	S07	Searching for Intern Position
Pat Cisar	S07	Journeyman Electrician, Sioux Falls
Daniel Lewis-Coomes	S07	Missouri River Energy Services
Molly Houck	F07	WAPA, Watertown
Aaron Kleinsasser	F07	Strongly considering Power Career
Trevor Howard	F07	Central Power Electric Coop Minot ND
Derek Bryant	F07	Daktronics
Blake Schneider	S08-F08	SDSU Orientation Leader
Braden Bills	S08-F08	Searching for Intern Position
Chris Mouw	S08-F08	Searching for Intern Position
Corey Kramer	S08-F08	Sioux Valley Hospital

Center for Power Systems Studies  
Semiannual Meeting – Madison, SD  
COORDINATOR'S REPORT  
April 20, 2006

---

Of approximately 25 students graduating in the fall of 2005 and the spring of 2006, 6 declared power as their career path, which is 24% of the graduating seniors (up from 15% in the prior year). From spring 2000 to present, approximately 35 of 164, or 21% of SDSU EE graduates, have either obtained or are pursuing a career in power.

V. Summer Activity

Steve Hietpas

1. Supervise and Rick Haub in the construction of 4-quadrant motor drives and 3-hp Volts/Hz AC Induction Motor Drives
2. Work in capacity of Program Coordinator for EE program in June and July

Michael Ropp

1. Wind Resource Assessment Network
2. Supervising eight graduate students on various projects
3. NSF-CAREER award
4. PV in the Parks Field Trip to Alaska

Respectfully submitted,

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