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’ 44th 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. Power Faculty Update  
   a. Dr. Reinaldo Tonkoski  
      Dr. Reinaldo Tonkoski joined the Electrical Engineering and Computer Science Department this February as a new assistant professor in the area of power systems. He received his B.A.Sc. degree in Control and Automation Engineering, in 2004; his M.Sc. in Electrical Engineering in 2006 from PUC-RS (Pontifícia Universidade Católica do RS), Brazil; and his Ph.D. in 2011 from Concordia University, Canada. He was with Canmet ENERGY, Natural Resources Canada, from January 2009 to January 2010 where he worked on projects related to grid integration of renewable energy sources. His research interests include grid integration of renewable energy systems, distributed generation, power quality and power electronics.  
   b. Open Power Position Search in Progress – Plan to fill by fall of 2012  

II. Current Undergraduate Power Curriculum  
   a. Electromechanical Systems and Lab (EE430/430L: 4 cr, offered each fall)  
   b. Power Systems Analysis and Lab (EE434/L: 4 cr, offered odd-year spring semester)  
   c. Photovoltaic Applications and Lab (EE436/536/L: 4 cr, offered even-year spring semester, summer lab)  
   d. Power Technology Tour (EE438: 1 cr, offered odd-year summer)  
   e. Power Electronics (EE492/592/L” 3+1 cr, alternate fall semesters)  
   f. Internship (EE 494: 1 to 3 cr)  

III. Future Undergraduate Power-Related Tracks and Curriculum  
   a. Power Utility Track  
      • Power Systems Analysis I and Lab (4 cr)  
      • Power Systems Analysis II and Lab (4 cr)  
      • Power Distribution Systems and Lab (3 or 4 cr)  
      • Power Technology Tour (1 cr)  
      • Internship (1 to 3 cr)  
   b. Power Electronics Track  
      • Electromechanical Systems and Lab (4 cr)  
      • Power Electronics and Lab (4 cr)
• Photovoltaic Applications and Lab (4 cr)
• Power Technology Tour (1 cr)
• Internship (1 to 3 cr)

IV. Power-Faculty Course Update
a. Spring 2012
   • EE436/536 (3 cr) Photovoltaics Applications, 12/15 students, (Galipeau/Tonkoski)
   • EE315 (3 cr) Linear Controls, 24 students (Hietpas)
b. Fall 2012
   • EE430/430L (3+1 cr) Electromechanical Systems and Lab (Tonkoski)
c. Spring 2013
   • EE434/434L (3+1 cr) Power Systems and Lab (Tonkoski or new Power Professor)

V. Other Activities During Spring Semester
a. Hietpas
   • advised CPSS Senior Project
   • worked with IEEE-PES Recipients to assist in “recruiting” and “mentoring” freshmen and sophomore power students
     • Mini-tour (WAPA, Watertown, April 13)
     • Potentially assist students with their IEEE-PES Scholarship Application
b. Tonkoski
   • Writing grants and interviewing perspective power graduate students
   • Worked with the power position search committee to identify suitable candidates
   • Assisted Dr. Galipeau in the course EE436/536 - Photovoltaics Applications
   • Served with the EE Scholarship Committee

a. The EE Program will award approximately $30,000 in scholarships
b. Of this total, approximately 50% are a direct result of the power community sponsorship
VII. Status of Power Students
   a. Power Graduates Update

<table>
<thead>
<tr>
<th>Student</th>
<th>Graduation Semester</th>
<th>Place of Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradley Seely</td>
<td>Fall 2011</td>
<td>WAPA, Aberdeen, SD</td>
</tr>
<tr>
<td>Matthew Bult</td>
<td>Fall 2011</td>
<td>Westar Energy, Wichita, Kansas</td>
</tr>
<tr>
<td>Amanda Kauer</td>
<td>Spring 2012</td>
<td>ENERCON, Overland Park, KS</td>
</tr>
<tr>
<td>Emily Miller</td>
<td>Spring 2012</td>
<td>Interstates Engineering, Sioux Center, IA</td>
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<tr>
<td>Greg Zimmerman</td>
<td>Spring 2012</td>
<td>Interstates Engineering, Sioux Center, IA</td>
</tr>
</tbody>
</table>

19 students are scheduled to graduate spring 2012

b. Summer Positions, Engineering Internships, or Cooperatives

<table>
<thead>
<tr>
<th>Student</th>
<th>Summer Place of Employment</th>
<th>Expected Graduation</th>
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<tbody>
<tr>
<td>Wesley Davis†</td>
<td>Northern Plains Power Technology, Brookings, SD</td>
<td>Fall 2012</td>
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<tr>
<td>Ryan Kleinjan*</td>
<td>DeWild Grant Reckert &amp; Assoc., Co.</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Jeremy Nelson*</td>
<td>East River Electric Power Cooperative, Madison, SD</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Richard Fitzpatrick*</td>
<td>Interstates Engineering, Sioux Center, IA</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Reece Chambers</td>
<td>Missouri River Energy Services, Sioux Falls, SD</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Dusty Botz</td>
<td>Electrical Intern/Power Lineman, WAPA, Watertown, SD</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Cory Kostboth</td>
<td>Interstates Controls, Sioux Falls, SD</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>Cole Sandness*</td>
<td>Xcel Energy, Prairie Island Nuclear Plan, Welch, MN</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Evan Leebens</td>
<td>SDSU, Photovoltaics Research Group, Dr. Qiquan Qiao</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Kelly Nelson</td>
<td>Seeking Summer Internship</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Jake Buckmiller</td>
<td>Freshmen</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>Laura Froehlich</td>
<td>Freshmen</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>Luke Jensen</td>
<td>Freshmen</td>
<td>Spring 2015</td>
</tr>
<tr>
<td>Kody Pataky</td>
<td>Freshmen</td>
<td>Spring 2015</td>
</tr>
</tbody>
</table>

† CPSS Scholarship
* IEEE PES Scholarship Recipients
VIII. Summer Power and or CPSS Activity
   a. Hietpas
      • Hire new power professor
      • Move the Crothers Engineering Hall Energy Lab to West Wing of new ECS, now called the Daktronics Engineering Hall
      • Work with Conference Committee with preparations for 2012 Biannual CPSS South Dakota Regional Power Conference
      • Serve with IEEE-PES Scholarship Committee, Region 4
      • Attend Univ. of MN Power-Consortium Meeting
   b. Tonkoski
      • Start graduate student research projects
      • Redesign course EE430/430L - Electromechanical Systems and Lab
      • Identify industry partners/collaborators for research proposals
      • Write proposals to obtain funding from external agencies
      • Attend Univ. of MN Power-Consortium Meeting

Respectfully submitted,

Steven M. Hietpas, Ph.D., P.E.
Coordinator, Center for Power Systems Studies
Head of EE and CS Dept.
Professor of Electrical Engineering