

Center for Power System Studies
Annual Meeting
MINUTES
April 13, 2000 – Milbank, SD

1. **Call to Order:** Meeting was called to order at 12:50 p.m. by Steve Hietpas.
2. **Recording Secretary:** Steven Arbach (NWPS)
3. **Roll Call:** See attached attendance sheet.
4. **Approval of Agenda:** Larry DeKramer moved and Jim Dougherty seconded to approve agenda. Passed unanimously by voice vote.
5. **Approval of September 15th, 1999 Minutes of Annual Meeting held in Brookings, SD:** Greg Vaselaar moved to accept Minutes. Seconded by Jerry Schmolli with exception of correcting Greg Vaselaar spelling. Passed unanimously by voice vote.
6. **Coordinator's Report:** Steve Hietpas - Please refer to the Coordinators Report for complete details. Some highlights included:
CPSS activities for fall 1999 and spring 2000:
 - a. Casey Sichmeller, junior EE student with coordinator guidance has been supervising three seniors mechanical engineering students in the design of a mobile dynamometer unit for use in the new energy conversion laboratory.
 - b. Completed the contractual requirements of the American Public Power Association DEED grant awarded for the 1999 year -submitted mid January.
 - c. Awarded an NSF Course, Curriculum and Laboratory Improvement Grant for the period from January 1, 2000 to December 31, 2001. The grant is co-authored by Michael Ropp. The award amount is \$139,987 with matching funds from the SDSU Foundation, Alumni and Corporate sponsors in the amount of \$155,615. Two graduate students and one undergraduate will work to redesign experiments.Other Scholarly Activities:
 - a. Co-Chaired the South Dakota Electrical Council 2000 Convention, April 2-3, Brookings, SD.
 - b. Has found reviewing books for McGraw-Hill to be quite useful for the NSF project.Student Opportunities and Power Related Graduates:
 - a. Nine scholarships have been awarded. Submitted applications reviewed by Coordinator. Selection criteria included CPSS activity involvement, grade point, presentation, & commitment.
 - b. Notation was made to check CPSS home page when searching for interns and new hires. Graduation dates are listed.
 - c. Brian Schuldt was the only student graduating in the 1999/2000 school year to take a power related job.Faculty & the Power Program:
 - a. Seminar in Power Systems was cancelled due to low enrollment.
 - b. Have arranged for possibly four students to take Power Systems Analysis next fall. The course will have to be offered as either a 2 or 3 credit Special Topic EE492 course.
 - c. Dr. Ropp was given recognition as a valuable asset for the power program.Research Laboratory:
 - a. Areas upgraded are:
 - 10 kVA 3-Phase Programmable Power Supply
 - Programmable Electronic DC Load Bank
 - Programmable Electronic 3-Phase AC Load Bank
 - New PC
 - New lab bench (have money for one more)Opened for Questions:
 - a. Criteria for scholarship recipients was discussed as above.
 - b. List of members was reviewed.

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7. **Deans COE Report:** Dr. Virgil Ellerbruch - Power Point presentation and handout on challenges of the future.
Some highlights included:
Academic challenges:
Integrating extra 2 credits for Land Grant concept into every curriculum.
Issue at BOR level to reduce to 120 Credits for all degrees is on hold.
Polytechnic center is a different approach to course delivery.
Academic Challenges Advising:
Advise students to meet core requirements before taking the Proficiency Examination.
(test scheduled after 48 credits completed)
Advise students to include international and technology content in Gen Ed Core. This has made advising students more difficult.
Academic Challenges Accreditation:
Program Assessment is critical to each program and is internally done every 7 years.
ABET accreditation
7/10 Management:
Minimum enrollments- 10 students for undergraduate courses, 7 students for graduate courses
some courses are exempted, such as special Topics.
Still a major concern when offering new material and graduate programs.
EUC\ Electronic University Consortium:
Faculty has and is developing courses for distance delivery. There are challenges redirecting the faculty, resourcing delivery and development costs, and with course ownership.
95/5 Funding and Three-Year Salary Plan:
These remove 6.65% from the SDSU base budget. There is limited equipment money. There is the ongoing challenge of evaluating faculty for merit increases.
Student activities:
Phonathon, Engineering Expo, High School Visitors Team, Review sessions for FE examination
Keeping students involved presents a challenge.
Research:
Dr. Dennis Helder is the Director of Research. The program is growing.
Administration:
Dean Kurtenbach is the External Dean. He works with companies one day per week. Dean Ellerbruch is the Internal Dean. Foundation-Dr. Sander and Ed Storey.
A Dean search will start this summer.
Administration Challenges:
Recruit excellent students and faculty.
CEH addition & renovation project status.
8. **EE Department Report:** Dr. Brown - Report and handout.
Some highlights include:
Electrical Engineering Enrollments Over Past Five Years
Undergraduate
a.1999:168+ Precise enrollments with new student information management system are difficult.
Enrollment is still recovering from dramatic drop following changes in reciprocity, enrollment caps, and the 7/10 policy. Reciprocity talks are back on the table again- they can have a big impact on enrollments. There is good news in that Circuits I and Circuits II enrollments are as high as 29.
Graduate
a. Enrollment up to a total of 15 M.S. students, which includes only 3 domestic (U.S.) students.
Last years enrollment was 14. The financial incentive to work now and earn a graduate degree later with employee assistance is difficult for students to pass up. We could have as many international MS students as we desire if we had more GTA or GRA funds.
Electrical Engineering Instructional Program
a. Midcontinent Fiber Optics Laboratory is in operation (122 Harding Hall). Joe Floyd donated

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the last funds needed to complete. It is a state of the art facility. Dr. Andrawis is already using the facility for a new laboratory course. The department has updated several courses including Linear Controls

Optical Fiber Communications, Senior Design I/II, and some Power courses.

- b. The loss of two teaching positions in the department in recent years has made it necessary to substantially increase the teaching workloads of the faculty, and to reduce frequency of offering for some core courses. This has unfortunately caused some of the class sizes to grow substantially.

Electrical Engineering Research Efforts

- a. Research work continued to grow in 1999/2000, with faculty successfully bringing in outside funding for research and engineering work in the areas of electronic materials and sensor devices, image processing, and power/energy engineering.

Electrical Engineering Service Efforts

- a. The students and faculty of the department continued their involvement with industry and the community -at-large. A growing number of students are completing internships at local and regional companies.

Additional Electrical Engineering Accomplishments

- a. Most of the EE faculty, and several students, received additional competitive research grants and scholarship awards. for their involvement in research. 1999/2000 has been a successful year despite 95/5, 7/10, and reciprocity. Special mention was made on how much encouragement students get from Dr. Hietpas.

Opened for Questions

- a. There was a question and discussion on EUC- How does it relate to the EE department. All Instructors teach courses with internet assistance. It is a challenge to tell how much you can do without any classroom contact.

9. ***ME Department Report:***

- a. More than half of students are getting jobs in SD.
- b. More opportunities for interns.
- c. Students are employed in almost all industries including automotive, chemical, aircraft/aerospace, power, petroleum, computer, machinery (industrial, farm office)
- d. Report handed out for review.

10. ***Selection of Annual Project:***

- a. Students to be involved with design of Energy Conversion Lab.
Presently have the equipment, but this is a time intensive project. This will be a good real world project for the students. CPSS commitment will be \$3000-\$3200. It will be a good way for CPSS to assist the students. Dr. Hietpas encouraged input or suggestions on the design. A motion was made to accept the proposal for the Energy Conversion Lab by Jim Dougherty and seconded by Bob Endahl. Motion carried unanimously by voice vote, after discussion on design/build process.

11. ***Report by Conference Committee:*** Greg Vaselaar - Results of survey - will be shooting for next spring for updated conference. Don't want to conflict with SDEC
Continuing ED - marketing tool
Greg will put together a tentative agenda.

12. ***Report on 2000-2001 Proposed Budget:*** Included report - presented by Steve Hietpas. Discussion on Associate members, existing and candidates.
Changed dates for balances on hand on handouts from 2001 to 2000 and from 2002 to 2001. There was discussion on cash on hand figures. Dr. Hietpas suggested getting cash on hand back to \$3000 for contingency. He will look for ways to eliminate spending to accomplish this.

13. ***Meeting Date for Annual Meeting (fall):***

September 19 - 20. Motion made by Bob Endahl, seconded by Dennis Wagner. Motion approved by

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unanimous voice vote.

14. ***Motion to Express Appreciation to Otter Tail Power Company as the Host Organization:***
Motion made by Greg Vaselaar and Seconded by Jim Dougherty. It was so moved and accepted and the motion passes.
Motion made by Wayne Knabach in appreciation of Ron Lamberty- associate member for his continued support.

Meeting adjourned at 3:21 p.m.

Respectfully submitted,

Steven Arbach
Recording Secretary
April 13, 2000