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University of Wyoming
SCHOOL OF ENERGY RESOURCES
Second Annual Report, 1 October 2007
[Pursuant to W.S. 21-17-117(f)]

To the Joint Minerals, Business and Economic Development Interim Committee,
Joint Appropriations Interim Committee, and the
Joint Education Interim Committee

Submitted by: Mark A. Northam, Director, School of Energy Resources

Executive Summary

This document is the second annual report of growth and development of the School of Energy Resources (SER) at the University of Wyoming, but the first one to cover and full year of operation. SER's objectives are to provide nationally-competitive undergraduate and graduate instruction in energy-related disciplines, to advance Wyoming's energy-related science, technology and economics research, and to support scientific and engineering outreach through dissemination of information to Wyoming's energy industries, companies, community colleges, and government agencies.

Academics

Recruiting was quite active during the year. An international search for a permanent director was begun in August 2006, when the first meeting of the Energy Resources Council was held, and resulted in the hiring of Dr. Mark Northam of Saudi Aramco who took up this post on July 17, 2007. Four distinguished faculty searches were conducted in the areas of Geology and Geophysics, Chemical and Petroleum Engineering, Economics and Finance, and Mathematics. Currently, one offer has been accepted, (Dr. Felipe Pereira – Mathematics) two are pending (a second Math position and the Chem. & Pet. Eng. position). The Geology & Geophysics and Economics searches are ongoing. In addition, two additional searches – Chemistry and Reclamation Ecology – are in their very early stages. Finally, we are searching internally for a permanent Academic Coordinator.

Other academic initiatives in 2006-07 included:

- Formation of an Academic Council who began curriculum development for SER with faculty and department heads from across the university;
- The Energy Summer Institute for high school students, teachers, and counselors; and
- Allocation of competitively awarded Graduate Assistantships.

A preliminary model for the SER undergraduate program was proposed, but much work remains to be done to make it a reality. Graduate programs will also be developed in the coming year.

Research

Several research initiatives commenced in 2006-07. The most significant of these were the following:

- A \$500,000 Matching Grant Fund program to stimulate energy-related research at UW;

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- The organization of interdisciplinary Research Centers;
- The Clean Coal Technologies Research Program, and;
- The Wyoming Infrastructure Authority study.

The Matching Grant Fund committed \$810,200 to 17 diverse energy-related proposals, contingent on the investigators receiving the matching external awards. At the current time nine grants totaling \$437,600 have been awarded, with three (potentially \$272,600) still pending. Six Research Centers have been organized to solve particular research problems. These centers will evolve with time, and new centers may form to work on emerging energy-related problems. To that end, “seed money” grants totaling nearly \$200,000 were made to several interdisciplinary groups who were working to develop SER research centers.

Nine groups responded to the Clean Coal Technologies RFP with proposal requesting a total of \$3.5 million. The proposals have been through review and evaluation by the Clean Coal Task Force (CCTF). The CCTF recommended funding four proposals, pending approval from the governor and legislature.

Outreach

SER conducted its outreach mission in 2006-07 through a variety of programs, including:

- The School of Energy Resources Lecture Series;
- A series of public lectures entitled Energy Futures: Global Changes that Challenge Wyoming;
- Two public symposia on coal gasification and CO₂ Sequestration;
- Sponsorship of the Wyoming Conservation Corps, and;
- Participation in conferences, exhibitions, and trade fairs

These activities served to enhance SER’s visibility and to establish its identity on campus and around the state. They brought internationally recognized experts in diverse energy fields to campus to present lectures. They also sent university faculty and leaders to various events and gatherings in Wyoming communities interact with the public, the media, energy experts, potential students, and other interested parties.

Outreach activities continue at about the same pace this year. SER is a co-sponsor (with Enhanced Oil Recovery Institute and the School of Environment and Natural Resources) of a summit on “Finding the Balance: Energy and Climate” to be held in Teton Village 8-10 October 2007. Another lecture series and several public symposia are also planned.

Development Activities

The construction of a state-of-the-art UW School of Energy Resources Center is the University’s highest priority for private support through the University’s academic facilities matching funds program. The Wyoming Legislature appropriated, and the Governor approved \$20 million in state matching funds for construction of the Center. As of the end of September, \$18.6 million has been raised through gifts and state matching funds to build the SER Center, envisioned as a \$40 million project. Major contributors include Encana Oil & Gas, Shell Exploration & Production Company, BP, and ConocoPhillips.

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In addition Jim Nielson, president of Nielson & Associates, has gifted \$5 million toward an endowment for SER's general operations.