

Energy Resources Council (ERC)

MINUTES

August 24, 2018

BP Center

8:00 AM – 2:00 PM

CALL TO ORDER:

The meeting was called to order at 8:00 AM by Vice Chairman, Senator Anderson

ATTENDANCE:

ERC Members Present

Jeane Hull, Vello Kuuskraa, WY Senator James Anderson, Cindy Crane, WY House Representative Mike Greear, Dave True, Laurie Nichols, Rob Wallace and Carl Bauer (via phone)

ERC Members Absent

Dave Emery, Tom Botts, Mindy Benson, and Laurie Nichols

SER Staff in Attendance

Mark Northam, Rob Hurless, Trish Steger, Pam Henderson, Rachel Ferrell, Richard Horner, Scott Quillinan, Andrew Florita, Trish Steger, Brandon Hinze, Tara Righetti, Emma Jane Alexander, and Carrie Ver Burg,

Others in Attendance

Jason Begger and Briana Long

MEETING ITEMS BY DETAIL:

Approval of Agenda

Action: A motion was made by Ms. Crane to accept the agenda as presented with the addition of a special announcement. It was seconded by Ms. Hull. Motion passed without objection.

Special Announcement

Summary: Senator Anderson announced the resignation of Jeane Hull from the ERC Chairman position due to schedule conflicts. Ms. Hull will retain her position as an ERC member. He called for new nominations from the floor. Mr. Bauer nominated Cindy Crane. The nomination was seconded by Rob Wallace. The council voted and the motion was approved without objection.

Approval of November 2017 Minutes

Action: A motion was made by Ms. Crane to accept the minutes with two grammatical changes. Mr. Kuuskraa seconded it. Motion passed without objection.

SER Budgets

Summary: Ms. Ferrell presented the FY18 operating budget year-end report. There were no reversions of funds. Approximately eleven million five hundred thousand dollars was spent. This amount will increase slightly as there are still a few outstanding expenditure expected to occur. Eleven faculty were supported during FY18. The full two million dollar appropriation for carbon engineering has been expended.

It is anticipated that the operating budget for FY19 will be ten million six hundred thousand dollars – nine million one hundred thousand in the regular operating budget and one million five hundred thousand dollars for carbon engineering.

Ms. Ferrell brought attention to the Foundation funds report. Fundraising efforts are underway and the Governor has agreed to participate. Goals include raising twenty million dollars for Geo Mechanics and additional fifty to one hundred million dollars for the second phase of fundraising.

The grant report continues to evolve and provide a more detailed breakdown of the funds brought into SER and depicting how their expenditures impact the university and the state of Wyoming. Senator Anderson requested a timeline be added to the report.

Follow Up Discussion – Carbon Engineering Individual Projects

Summary: The ERC members expressed their appreciation for the presentations by several members of faculty and students working on the carbon-engineering project. Senator Anderson suggested the legislators be invited to participate in the next round of presentations. Mr. Kuuskraa commented on the enthusiasm generated by the presentations and the strong science exemplified throughout the presentations. He requested that future presentations should contain information on market size and competitors. The progress in development was noted by several council members and the questions was raised as to how many of the projects would move forward in their development. Mr. Horner informed the council that the market would determine which projects continue forward in their development and which ones will continue

to incubate. Projects are evaluated every six months.

DIVISION UPDATES

Full copies of all SER division reports are available in the August **2018 ERC Notebook** or upon request.

EORI

Highlights: EORI is actively preparing for the Oil & Gas fair, which is scheduled to be held in Casper, Wyoming September 12th and 13th, 2018 at the Casper Event Center. In addition, EORI will be hosting a Distinguished Workshop series. Workshops will be held throughout the state. A final review of the memorandum of understanding between the EORI and the University of Wyoming has been scheduled with the Provost. Results are pending.

Academics

Highlights: It is anticipated that there will be fourteen graduates from the SER for FY18-19. Enrollment is currently at fifty-four students. Most students are from within the state and recipients of the Hathaway scholarship. Almost all students, at this time, are in good to stable academic standing within the program. An offer has been made to a new academic advisor. This position is funded by SER. The acceptance of this position is pending. The Southern Alberta Institute of Technology agreement has been drafted, but not concluded. The Office of Local Engagement is working on it and Tara Righetti will attend a meeting in Alberta, Canada in early September to further discussions. A new view book marketing tool has been developed to assist with recruitment efforts. Additional recruitment tools are under development, as well as, a communications and social media marketing plan. It is a goal to add twenty new students into the Energy Land and Water concentration.

Center for Economic Geology Research (CEGR)

Highlights: The center is fully grant funded for FY19-FY20 and into early FY21. It is anticipated that CEGR will add two new grant-funded hires – one to replace the position vacated by Mr. Quillinan and a new position, which is being created. US-China Clean Energy Research Center (CERC) Phase II continues to proceed well and the center is ramping up for the beginning of Phase III. CEGR will play a larger role than before in Phase III. Mr. Coddington was pleased to announce the Department of Energy award notification for Phase II of the CarbonSafe program. Phase II is funding for a feasibility study of the Gillette Dry Fork Site. CEGR has several additional grant applications pending.

Research & Outreach

Highlights: SER currently has two projects funded by US-China Clean Energy Research Center (CERC): *A Joint Study to Develop a Commercial-Scale Integrated CCU Demonstration Project in the Ordos Basin, China and Development and Demonstration of a Transformation CO2 Capture Technology.* The annual meeting of CERC is scheduled for October 10th- 13th, 2018 in Taiyuan China. Mr. Quillinan and several members of CEGR will attend.

Mr. Quillinan announced the resignation of the Outreach Coordinator, Kim Shannon, which took place in July 2018. This position is currently vacant. He reminded the council of the following calendar events:

- September 12th- 14th – WY Oil & Gas Fair
- September 15th- Energy Day @ UW
- September 14th - SER Fall Speakers Series
- Coming in October – Energy Law Conference

3D Visualization Lab

Highlights: Reorganization plans are under development to increase the technology capability and the staffing expertise of the 3D Visualization Lab. The Viz Center would like to support the university's distance learning initiative, build capacity to better serve large groups, add to or enhance UW's virtual reality offerings, and possibly act as a pre-incubator facility to test new business concepts. Several new pilot projects to support teaching and research are underway including: Fossil Viz, Soil Sim, Volcano Sim, and Life Science Augmented Reality for Teaching. Gillette College has undertaken a discussion with the Viz Center to consider a joint venture aligning their efforts in immersive 3D Virtual Reality.

Carbon Safe & Dry Fork ITC

Summary: Jason Begger, Executive Director, Wyoming Infrastructure Authority, provided a presentation on the Wyoming Integrated Test Center (ITC). Construction for the ITC started in 2016 and was completed in May 2018. A dedication ceremony took place on May 16, 2018. The total construction cost for the center was approximately 2.5 million dollars. The project came in 17% under budget. These cost savings will be rolled into maintenance and operation costs over the next eight years. The ITC currently has three main tenants: XPRIZE, Kawasaki Heavy Industries and Membrane Technology Research. A copy of the PPT, **NEXT GENERATION TECHNOLOGY FOR TODAY'S ENERGY**, is available upon request.

Kipp Coddington, Director, Center for Economic Geology Research (CEGR), provided a presentation on the CarbonSAFE project. CEGR has received federal grant awards to conduct the research and development at the Dry Forks Station site. The project consists of four phases that

will be funded. At this time, only Phase I and Phase II have been awarded. Phase I (2017-2018) is a pre-feasibility study for a commercial-scale geological storage site and Phase 2 (2018-2020) will be a storage complex feasibility study. A copy of the PPT, **Wyoming CarbonSAFE: Overview and Update**, is available upon request.

Annual Report

Summary: Dr. Northam provided a draft copy of the SER Annual Report FY18 to the council for their review and comments. Some of the highlights mentioned included the clarification of use for the first floor lab and the third floor lab. Both, of which, will now be utilized for carbon engineering research; decreased costs for SER personnel; and more use of the Nielson funds for scholarships and fellowships to enhance our student recruitment efforts. Members were asked to submit their comments as soon as possible so the draft could be finalized and submitted to the State.

New Business

Summary: Ms. Steger presented the potential meeting dates for FY19 as follows:

March 21 and 22, 2019
May 22 and 23, 2019
August 22 and 23, 2019
November 14 and 15, 2019

The council agreed to review the dates and return their availability notifications to Ms. Steger. Chairwoman Crane expressed her regret that she would not be able to attend the November 2018 ERC meeting and joint session with the Board of Trustees due to a prior commitment.

Adjournment

Ms. Crane moved to adjourn the meeting for the purpose of entering into an executive session to discuss personnel issues. The motion was seconded by WY House Representative Greear. There were no objections. The meeting was formally adjourned at 1:55 PM.

Respectfully submitted:

Cindy Crane

James Anderson

Chairwoman

Vice-Chairman