

Energy Resources Council Meeting

Draft Minutes

May 17, 2013

UW Energy Innovation Center

7:45a.m. – 1:30p.m.

ERC Members Present:

Paul Lang, Tom Lockhart, Carl Bauer, Tom Botts, Indy Burke, Jim Anderson, Martha Wyrsh, David Emery, Dave Palmerlee, Rob Hurless (Governor's representative), Jeane Hull, Chris Boswell (UW President's representative)

ERC Members Absent:

Rob Wallace

SER Staff in Attendance:

Mark Northam, Mary Byrnes, Diana Hulme, Cath Harris, Abby Scott, Nadia Kaliszewski, Pam Henderson

Others Attending:

Myron Allen, Sam Kalen, Steve Easton, Jay Puckett, Ben Blalock, Chris Spooner

Action Items from Meeting:

1. Minutes for approval from March 22, 2013 - Approved

Agenda:

1. Minutes – March 22, 2013 – for approval
2. Division Updates
3. Budget
4. College of Law – Center of Law and Energy Resources in the Rockies
5. SER Positions
6. EIC (Energy Innovation Center)
7. Energy High Bay Research Facility
8. Staff Hiring and Retaining process report
9. Casper Star Tribune Information Request
10. Governor's Letter re: Rule Reduction
11. Saudi Visitors
12. Open House EIC – Plans

13. Executive Session – Personnel Matters
14. Adjourn

Minutes – March 22, 2013 – for approval

Action Taken: A motion to accept the minutes from March 22, 2013 was made by Carl Bauer, seconded by Davis Emery. It passed unanimously.

Division Updates

Outreach:

Mary discussed SER's co-sponsorship of the Energy & Water Nexus conference with the College of Business and Rocky Mountain Power scheduled for April 16-17, 2013. This event was canceled due to poor weather conditions, but will be rescheduled in the fall of 2013. SER Outreach is currently working on the following upcoming SER events: the *2013 Clean Coal Technology Research Symposium* on August 22, 2013 in the EIC Building one day prior to the next ERC meeting on August 23; the *International Conference on Future Technologies for Wind Energy* set for October 7-9, 2013 with the UW Wind Energy Research Center with support from the Department of Energy and Danish Technology University (DTU); *A Landscape Discussion on Energy Law in Wyoming*, November 13, 2013 in conjunction with the Center for Law and Energy Resources of the Rockies, Rocky Mountain Mineral Law Foundation, and the Rocky Mountain Chapter of the Energy Bar; and finally the *2014 International Advanced Coal Technologies Conference* on March 17 – 21, 2014 in Queensland, Australia. Paul Lang asks about the focus of the follow up Hydraulic Fracturing event-- will it be policy focused or will it have a technical focus? Tom Lockhart mentions he would like to see it be more technical and Lang agreed.

Additional Outreach efforts include: support and hosting of a variety of workshops on unconventional reservoir research; a Roundtable Discussion on Oil and Gas extraction challenges and opportunities; and a follow up symposium on the technical aspects identified from the Hydraulic Fracturing Forum in 2011. Nadia Kaliszewski, Outreach Coordinator, has been working on extensive website development and upgrades including a new section devoted to Wyoming's energy resources. Tom Botts asked about measuring readership of the website and Nadia responded that she has been tracking usage through Google Analytics. Nadia has also created a monthly E-Newsletter that is being distributed to about 2,000 subscribers. Dave Palmerlee asked if this is being sent to the Board of Trustees and Nadia confirmed it is being sent to the BOT.

Mary concluded by noting the next ERC meeting dates of August 22, 2013 and November 15, 2013.

Research:

Diana Hulme discussed the uranium fund research progress and budget. Paul Lang asked if there have been any issues with the projects and Diana said the only issues have been relative to permitting and this did cause some delays. Tom Lockhart said the legislature has a growing interest in uranium and value added products related to uranium, especially from House side. Jim Anderson agreed that there is similar interest in uranium from the Senate side.

Diana discussed the 3-D Visualization Cave Bootcamp that SER will be hosting by invitation on June 12-14 in the EIC.

Academics:

Don discussed the variety of academic programs offered through SER and described the recent graduates of Energy Resource Management and Development (ERMD) program. Ten ERMD Bachelor of Science degree students graduated on May 11, 2013. Seven students have successfully secured positions with Encana, Halliburton, DCP Midstream and InterTech Environmental in positions ranging from compliance coordinator to product enhancement field engineer. One student has been accepted for graduate studies in geomechanics at South Dakota School of Mines and the remaining two are continuing their job search. Paul Lang asked about the quality of jobs secured and the salaries. Don believes the jobs are excellent ranging from field engineers to environmental health and safety positions. Tom Botts asked about the aging demographics in the energy industry and if Don believes this is opening doors for SER graduates. Don agreed it is. Jeane Hull asked if SER can provide updates on the progress of these graduates at future ERC meetings.

Budget

SER has repurposed funds in the amount of \$1.63M from the Centers of Excellence (COE). These funds will be allocated to new opportunities and research efforts. Mark then noted that the faculty recruiting SER did this year was dismal and that SER didn't hire as many as positions as originally planned for. Moahong Fan has just started a \$1M project for the next 3 yrs. SER still has not figured out how to get the funded researchers to spend the money they have been granted. Chairman Lang asks if this is typical among all COE directors and/or researchers. Mark responded that there are a lot of reasons the funds are not getting spent. Diana is working on a proposal for better management of the research centers and how funds are used. SER will be presenting this to the ERC soon and perhaps at the next ERC meeting. The goal of this management is to improve communication of progress. Carl Bauer asked if these are university numbers and if they are greatly delayed, 6-8 months? Cath Harris said she believes the numbers are lagging only a month behind. Mark said the numbers are not any more than 6 months behind. Lang asked if this seed money being given to the COEs is providing the projected return SER is expecting? Diana is examining the options of improving the funding process, for example-- entering an "agreement" with the researchers, outlining expectations, how are they reaching out to leverage outside grant funding, templates for RFPs, communicating if there have been any changes in use of the money, etc... Diana and her staff are outlining a process for improved consistency and transparent requirements. Carl Bauer notes that all research projects are not created equal. Tom Botts asked if the ERC can see a detailed spending report of all funded projects. Mark notes that SER has considered hiring a specific administrator to assist the COEs as the lack of admin help to the COEs has hindered their ability to seek outside funding. Tom Lockhart says he thinks the ERC should be involved in analyzing the success of the COEs----Mark says there is only so much oversight SER and ERC can have, we can't tell these independent researchers what to focus on and what the outcomes of their research should be.

Mark then discusses the challenges with the hiring process. Jim Anderson asked why the hiring process has been “dismal”? Mark responds that he and Don Roth went out looking for four faculty positions. They were successful with Dario, but didn’t find any other candidates for the other positions. One reason is that industry is heavily recruiting these experts and salaries are typically higher. Mark said he has decided to change SER’s advertising approach and be more proactive in visiting potential candidates in person. Myron Allen commented that the collaborative opportunities with fellow professionals at UW were a large attraction for someone like Dario to accept the UW offer. Don Roth said SER is seeking candidates that want to do interdisciplinary research and collaborate with other faculty and researchers across campus.

College of Law

Steve Easton, Dean of the UW College of Law, discussed the establishment of the Center for Law and Energy in the Rockies. Paul Lang asked if there was any way SER and ERC can help with the program. Steve said he believes there are plenty of opportunities for collaboration, for example hiring of professors as well as opportunities for special courses/training specific to energy. Jay Puckett asked about the types of positions UW Law students are getting, are they getting jobs with energy companies directly as general counsel or with law firms? Steve said typically with law firms, but perhaps this is where the ERC could be of help. Martha Wyrsh said she believes the ERC could be of assistance with the hiring of these energy law graduates.

SER Positions

Don Roth and Mark Northam discussed how they have reevaluated their recruitment process with respect to professorships. Mark discussed hiring a new executive assistant and considering hiring a COE admin position. Tom Botts asked if these positions could 2 in 1. Marks said no, these will require different skills and one is a much higher level job.

EIC

Mark said there were some costs overruns with the construction of the Energy Innovation Center (EIC). UW Facilities Planning is working to mediate these costs. Mark detailed who is currently occupying the building and conducting lab work. The building should be fully functioning sometime in June.

Energy High Bay Research Facility

Ben Blalock, VP of UW Foundation, discussed the construction of the Energy High Bay Research Facility noting that UW has raised \$11.4M of which will be matched by the state for a total of \$22.8M. The Foundation is continuing their fundraising efforts. The Engineering STEM task force will be focusing on detailing more of the facilities so that donors will know more about what to expect. A discussion ensued regarding the space for a wind energy research facility and whether or not it should be integrated for wind research without any outside funding from the wind industry. Martha Wyrsh said she believes that a wind tunnel in the building is perhaps not the best idea that the wind

industry needs to gain more footing economically before there is more opportunity to support this type of investment. The building is set to be designed to allow for additions and easy modifications. Carl asks what the timeline for the building. Mark believes it could be about 2 years before building begins

Staff Hiring and Retaining process report

Myron Allen, UW Provost, discussed the UW staff hiring and retaining process. He discussed the language in HB 0001 from the 2013 legislative session. Paul Lang asks Tom Lockhart and Jim Anderson what they think of the HB. Tom Lockhart believes that because the legislature allocated specific monies to run SER (separate from the rest of UW) and that SER is so high-profile, statewide and nationally, that the legislature would like to see the ERC be more involved in the hiring process to ensure that the highest level of staff is retained. The ERC agreed that they don't need be involved in hiring of clerical staff, but with regard to administrator and leadership roles such as the director is fine if this is what the legislature wants to see and in line with the BOT.

Casper Star Tribune Information request

Chris Boswell is seeking to get more specific with Adam Voge's information request. UW has begun the process of responding to the request. Tom Botts asks Chris what he thinks the reporter's goal is. Chris believes he thinks that the reporter simply wants more information about SER processes and more details about the Saudi trip and the goals of the visit.

Governor's Letter re: Rule Reduction

Chris Boswell discussed Governor Mead's letter regarding rule reduction with the intention of simplifying rules in the state government. Chris asked the UW General Counsel about whether this affects UW. The answer was that UW does not engage in the formal rule making process such as other state agencies. UW General Counsel believes there does not need to be a response from the ERC or SER and Chris agrees this is adequate.

Saudi Visitors

Mark Northam discussed his recent trip to Saudi Arabia with Governor Matt Mead, Chad Deaton and Tom Botts. The group visited the Baker Hughes Eastern Hemisphere Education Centre in Dubai where they toured the manufacturing facility. The group then traveled to Saudi Arabia through Bahrain to visit the Baker Hughes Technology Center in Dhahran at the KFUPM Techno-Valley. Here the group visited with Dr. Khalid S. Al-Sultan, Rector, KFUPM and about 10 university folks. Dr. Al-Sultan suggested strong interest in student and faculty exchange as soon as this summer. He was especially keen on having UW students resident in Dhahran for summer sessions. Dr. Al-Sultan suggested joint faculty appointments with a variety of different configurations from distance teaching to time spent at each location. Dr. Abdullah Sultan was asked to serve as point contact with me to move ideas forward. Dr. Sultan is very aware of UW work in flow and transport in porous media and is keen to establish collaborative research. Next the group visited the Saudi Aramco Control Center and the center's supercomputer – 5.9 teraflops and 1,050 terabytes

storage. They toured the Drilling Simulator (Drill Sim 6000) and 3D Cave at the center as well. They discussed collaborative possibilities with Amin Nasser, Khaled Al-Buraik, Samer Al-Ashgar, Abdulazziz Al-Kaabi, Brian Gatto, and others. Amin Nasser suggested that Saudi Aramco has a history of funding chairs at partner universities; cited the recent Stanford relationship as a good model. Samer Al-Ashgar recognized the value of partnering with UW on the experimental and computational aspects of flow through porous media. Mark's private discussion with Samer Al-Ashgar indicated that \$15-30 million might be doable. He privately agreed that the "Smartwater" and "Resbot" research might be vastly accelerated with Dr. Piri's imaging capabilities. Al-Ashgar described their "Satellite Research Centers" – stating that there is no current interest or capacity in establishing more until they are more mature. Amin Nasser stated he is very supportive of a tri-partite relationship of UW/KFUPM/Saudi Aramco. Gov. Mead related that Cliff Hansen visit Saudi Arabia when in the Senate. Amin Nasser immediately sent a request to the archives of Saudi Aramco to research the visit—this seemed to really cement the relationship. The Saudi team is set to visit UW May 23 & 24 where Northam and Piri will further discuss flow through porous media research, engineering student and faculty exchange among other topics.

Open House EIC – Plans

Executive Session

Other Business

Mary Brynes notes the following:

- 1) ERC notebooks will no longer be printed unless upon request.
- 2) Flip the meetings around: ACTTF then head into the ERC. (This will be tricky to have Indy, Palmerlee and Sternberg attend --- we'll need a definite hour for the ERC to commence.)

Chairman Lang recommends the following topics for the next ERC agenda:

- 1) Don Roth to outline the academic/student metrics
- 2) Diana to create "Dashboard" for each Center of Excellence to include: goals, strategy and plans for sustainability
 - a. Invite 2 Center Directors, one successful center and one struggling center in to share the following:
 - i. Goals of Center (Mission – research area that they are solving) , strategy to achieving sustainability
- 3) Recruitment – Identify the problems of hiring top level faculty and hold a session during the ERC meeting to isolate efforts of solution the ERC can work towards. (Salaries, "bag of tricks", what we have to offer – how to work through and with the malaise of rules/policy to find a collective solution)
- 4) High Bay Facility – Outline the process and how to create this as an asset core to energy programs rather than a core exclusive to engineering. Generally, how can the ERC work to keep this budget/purpose aligned to the legislation and task force recommendations?
- 5) Records retention – UW policy and how this touches correspondence with the ERC.

Adjourn

Next Meetings: These dates have been circulated and settled:

- Aug 23, 2013
- November 16, 2013

Meeting adjourned at 1:30pm

Respectfully Submitted:

Paul Lang
Chairman

Tom Lockhart
Vice-Chairman

