

Energy Resources Council Meeting
Draft Minutes
August 24, 2012
UW Conference Center Hilton Garden Inn
8:00am – 3:00pm

ERC Members Present:

Ron Harper, Tom Lockhart, Kit Jennings, Carl Bauer, Dave Palmerlee, Rob Hurless (Governor's representative), Chris Boswell (representing Tom Buchanan), Jeane Hull, Martha Wyrsh (via telephone)

ERC Members Absent:

Rob Wallace, Tom Buchanan, Paul Lang, Indy Burke

SER Staff in Attendance:

Mark Northam, Mary Byrnes, Diana Hulme, Don Roth, Cath Harris, Nadia Kaliszewski, Pam Henderson, Bob Ballard, Abigail Mellinger

Others Attending:

Wendy Lowe, Wanda Burgett, Chris Spooner, Daman Walia, Vijay Sethi, Greg Nickerson, Crystal McDonough, Michael Curran, Lisa McDonald, Don Collins

Action Items from Meeting:

1. Minutes of May 18, 2012 – Approved
2. Minutes of June 18, 2012 - Approved
3. Draft Annual Report - Review and Feedback
4. Planning for the Update to the BOT - Nov 16th

Agenda:

1. Approval of minutes from May 18, 2012 and June 18, 2012
2. Introduction of new ERC members
3. Introduction of Chris Boswell, UW Government Relations
4. Engineering Complex Update – Rob Hurless, Ben Blalock
5. Fundraising Update - Ben Blalock, Chris Spooner
 - a. Corporate Relations' Officer
 - b. Stewardship Plan
6. Update on AML funding - Rob Hurless
 - a. HB 0121
7. Status of Strategy Implementation – Mark, Don
 - a. Recruitment, job descriptions, compensation
 - b. Plan to expend \$10 Million
 - c. Budgets
8. Draft Annual Report - Review and Feedback
9. EIC Building Update – Information
10. Planning for the Update to the BOT - Nov 16th
11. Outreach Update

- a. Xi'an China Conference and Power Generation Conference
- 12. Research Update
- 13. Executive Session – SER Personnel
- 14. Other Business
- 15. Adjourn - 10:20 AM

Next Meeting - November 16, 2012

Chairman Ron Harper called the meeting to order at 8:00 a.m.

Opening Remarks:

Summary: Chairman Harper opened the meeting by discussing a few housekeeping notes. He noted that from August 24, 2012 forward, Mary Byrnes and her staff will be responsible for reserving hotel rooms for ERC members.

Minutes from November 18, 2011 - Approved

Action Taken: A motion to accept the minutes from May 18, 2012 was made by Carl Bauer, seconded by Kit Jennings. It passed unanimously.

Minutes of June 18, 2012 - Approved

Action Taken: A motion to accept the minutes from June 18, 2012 was made by Carl Bauer, seconded by Kit Jennings. It passed unanimously.

Introduction of new ERC members:

Summary: Chairman Harper introduced two new members of the Energy Resources Council, Jeane Hull and Martha Wyrsh. Jeane L. Hull is the Executive Vice President and Chief Technical Officer for Peabody Energy and Martha B. Wyrsh is President of Vestas-American Wind Technology, Inc. for North America.

Introduction of Chris Boswell, UW Government Relations

Summary: Rob Hurless introduced Chris Boswell, the new VP of Government & Community Relations for the University of Wyoming.

Engineering Complex Update – Rob Hurless, Ben Blalock

Summary: Rob Hurless discussed the Governor's Energy, Engineering, STEM Integration Task Force. The group just completed a working retreat in Jackson. The Task Force is comprised of a variety of UW Alums from the energy industry. The Task Force's efforts can be characterized as a work in progress.

Fundraising Update

Summary: Chris Spooner discussed the fundraising efforts related to the Technology Enterprise Fund— a fund which will be allocated to ensuring the technology applications in the new Energy Innovation Center (EIC) are top notch. Chris reported that the Foundation has raised \$3.9 million including matching funds from the State. He said this was a collective effort that has been successful due to the dedication and vision of such people as

Mark Northam. The other fundraising efforts Chris touched on were the funds being raised for the implementation of SER's strategic plan. The Legislature set aside \$15M in matching funds and the Foundation has current commitments totaling to \$5.52M.

Update on AML funding

Summary: Rob Hurless discussed Wyoming Legislative Session 2012 HB 0121- which appropriated the Abandoned Mine Land (AML) funds. Over the last 6-7 years, compromise was made among east coast states and west coast states to begin allocating that money. This is where SER's AML funds came from. Hurless discussed the recent, last minute vote by the U.S. House on a bill that caps AML funds to \$15 million for states that have already cleaned up their mines. Wyoming is impacted most by these changes because it was originally slated to receive up to \$700 million over the next ten years. While the bill still needs to pass the senate, Hurless said he thinks nothing will happen with this bill until after the election.

Status of Strategy Implementation

Summary: Mark Northam provided an update on the implementation of the SER strategic plan. Referred to by the state legislature as the "strategic areas of concentration," Northam said SER and the ERC sat together about a year ago and designed the investment program with \$70 million, \$30 million over a 4 year period is allocated to SER for hiring new faculty and for new start-ups in the three areas of concentration. \$20 million in state matching funds will go toward building new facilities (20 in matching/20 in private). The legislature appropriated \$10 million of the \$30 and \$15 of the \$20 million as matching. Northam said the funds will not come in at the same time so SER has prioritized the funds to first go toward programs in exploiting unconventional reservoirs. The second priority is climbing the value chain, which is really an investment in advanced conversion technologies, for example converting natural gas and coal to value added products. The third area of priority is improving technology, intermittency and storage issues with respect to wind and solar technologies as well as converting these renewable sources to value added products. Northam said he feels the prioritization (unconventional reservoirs first) reflects the quickest way SER's efforts can achieve impacts to the bottom line in the state of Wyoming. With respect to the second priority, SER will begin researching advanced conversion technologies focusing first on the economics and business case for these potential technologies.

SER has begun implementing the program, for example, SER is working on a high-level design in conjunction with the Engineering Task Force for a high end research facility in the new engineering complex. To get certain types of research off the ground in unconventional reservoirs, Northam said SER faculty and researchers need new research space for large equipment and large core samples to be moved around and studied. This research facility will consume some of this \$30 million.

SER is currently in the process of recruiting faculty to fill 4-5 academic positions mainly for unconventional reservoirs. SER is looking to recruit for the following positions:

- Experimental and/or computational geomechanic

- Petrophysicist
- Petroleum systems expert, geoscientist, mud system sedimentologist, or stratigraphists
- Drilling and completions engineer
- High temperature catalysis or reaction engineer

The hiring process for these positions will be different than what has been done in the past. On a side note, SER is also seeking to hire an energy accountant and finance expert for the Energy Management MBA program as well as a Director for a new Advanced Oil and Gas Technology Center.

Don Roth said SER, in its new faculty recruiting efforts, has identified industry representatives to serve on a special search committee to help oversee the recruiting efforts. SER is seeking individuals who have experience working closely in or with industry, who can actively bring in and nurture industry relationships, and bring in grant funds. Northam said he envisions these individuals to have research and teaching responsibilities in addition to leadership skills, motivated to develop and lead research projects or centers, and an excellent record of bringing in grants. These will be mid-senior level individuals with a solid reputation.

Mark Northam said the process of tenure has been a concern and an issue with past hires. He said SER wants to hire individuals who have already achieved tenure allowing the new hires to concentrate on the SER mission and focused work. The ideal hires will have experience collaborating, leading teams, and be synergistic in nature. SER is not limiting the search to solely academics, but is also considering those from industry with the right credentials.

Dave Palmerlee inquired about SER's relationship with the College of Law and hiring a position for that collaboration.

Mark Northam said hiring the Energy Regulation, Policy and Law Initiative is not part of the larger strategy discussed earlier, but business as usual for SER's ongoing collaborative efforts. SER and the College of Law are seeking a senior individual with industry and/or government agency experience to fill a director position and help develop the program. Mark thinks the position will be filled by early 2013. This person does not need to be a tenured academic. SER and the College of Law will share this individual 50/50. This is moving forward.

To expend the \$10M, Mark said that a significant portion of these funds will go toward the hiring these 4-5 new SER faculty and a significant start-up package for these individuals. The start-up package will be a mix of private funds and the state's \$10M.

SER is monitoring the spending of the centers of excellence and other researchers on a quarterly basis and repurposing, if warranted, such as the recent RFP for large equipment

purchases. These equipment purchases will help with recruiting and advanced research that benefit many different programs.

The reversion (unspent FY11-12 funds) is \$150,779.

Draft Annual Report - Review and Feedback

Summary: The annual report is due on September 30, 2012. The draft will be sent to the ERC electronically for feedback.

EIC Building Update

Summary:

Diana Hulme provided an update on the EIC. Due to the need for mechanical and electrical system redesign to the laboratory on the third floor (Dr. Mohammad Piri's Digital Rock Physics Lab), the date for 100% building completion has been delayed until March 2013.. Completion of EIC will be phased to accommodate additional work required by third floor lab redesign.

The current plan is to start moving furniture into the finished spaces (offices, lobbies, conference rooms) of the building in by late October and early November 2012. Employees can take occupancy of the finished spaces in late November.

There are other building costs that have not been finalized. These include redesign of the third floor laboratory mechanical and electrical systems, design and support for the 3D visualization system, and installation of the audio/visualization system.

Mark mentioned SER will be having the ground breaking, ribbon cutting event in mid-January. The ribbon cutting will be discussed at the November ERC meeting.

Tom Lockhart said he would reach out to the Stroock family to get their input for the Tom Stroock memorial plaque to honor Tom as a founding member of the Energy Resources Council.

Planning for the Update to the BOT - Nov 16th

Summary: Ron and Mark will work on putting together this update and said he encourages any ERC members to share their input if they would like.

Dave Palmerlee said the BOT has a very strong interest in what SER and the ERC are doing. Dave and Ron will touch base on this update.

Outreach Update

Summary: Mary Byrnes provided an update on the Third International Advanced Coal Technologies Conference in Xi'an, China, reviewing industry representatives who attended and spoke at the conference and of the continued relationship-building opportunities with Australian and Chinese delegates. She noted that 12 UW students were able to attend the conference and said that one of SER's ERMD students secured a job from his attendance and networking at the conference. SER has written a summary report of the conference.

The final cost of the conference was \$155,000 to support government representatives, speakers, and SER staff.

Mary also discussed the upcoming Power Generation and the Environment Conference in Jackson, WY Oct 1-2, 2012.

Research Update

Summary: Diana Hulme reported on the Matching Grants Fund program, the Uranium Research Fund, and the Clean Coal Technology/ACT Account.

A call for Matching Grants Fund proposals for the FY2012 MGF was issued on February 1, 2012. Fourteen proposals were submitted and 5 were approved for funding commitments in the amount of \$359,968. Since 2007, \$3,276,346 in funds from the MGF has leveraged \$11,204,607 in external funds.

In the 2009 General Session, the Legislature of the State of Wyoming appropriated \$1.6 million to the University of Wyoming School of Energy Resources (SER) for activities related to the in-situ recovery of uranium (ISRU) in Wyoming (Uranium Research Fund). In March 2011, in accordance with the legislation, SER issued a request for proposal (RFP) for research focused on in-situ uranium extraction. Four proposals were awarded funding, for a total amount of \$826,849. SER issued an additional RFP for research on ISRU on June 14, 2012. The deadline for the 2012 RFP was August 13, 2012, and awards will be made by November 30, 2012. SER plans to deploy the remaining \$578,614 of the original funding.

As of July 1, 2012, the Clean Coal Task Force and the Clean Coal Technologies Research Account were renamed the Advanced Conversion Technologies Task Force and the Advanced Conversion Technologies Research Account, respectively. This change is in accordance with Senate File 15 enacted the 2012 budget session of the Wyoming Legislature. Also in the 2012 budget session, the Legislature of the State of Wyoming appropriated \$10,000,000 to the Advanced Conversion Technologies Research Account. On June 1, 2012, SER released an RFP and received 33 proposals by the July 13, 2012 submittal deadline. The total amount of funds requested from the account was \$32,122,471, and the total amount of matching funds committed to proposed projects was \$48,161,780. Applicants will be notified of the status of their proposals no later than September 15, 2012. (Please see the Advanced Conversion Technologies Task Force August 24, 2012 meeting minutes for additional details.)

Executive Session – SER Personnel

Other Business

Summary: Ron Harper discussed his effort toward creating a “history book of ERC and SER efforts”. This compilation will include annual reports, executive summaries, protocols, etc. Ron said he would like to complete this before the next legislative session. Tom Lockhart suggested that this document be available for the Minerals committee which will be meeting at the end of October.

Next Meeting November 16, 2012

Meeting adjourned at 10:20a.m.

Respectfully Submitted:

Ron Harper
Chairman

Tom Lockhart
Vice-Chairman