Energy Resources Council Meeting

March 22, 2013 UW Conference Center, Salon F & G 7:45a.m. – 1:30p.m.

ERC Members Present:

Ron Harper, Tom Lockhart, Carl Bauer, Paul Lang, Indy Burke, Jim Anderson, Martha Wyrsch, David Emery, Dave Palmerlee, Rob Hurless (Governor's representative), Jeane Hull (via phone), Chris Boswell (UW President's representative), Rob Wallace (via phone)

ERC Members Absent:

SER Staff in Attendance:

Mark Northam, Mary Byrnes, Diana Hulme, Cath Harris, Abby Scott, Ron Surdam, Nadia Kaliszewski, Shanna Dahl

Others Attending:

Ben Blalock, Chris Spooner, Wendy Lowe, Rob Ettema

Action Items from Meeting:

- 1. Agenda for March 20, 2013 meeting Approved
- 2. Minutes of November 18, 2012 Approved
- 3. Election of Chairman Lang Approved
- 4. Re-Election of Vice-Chairman Lockhart Approved

Agenda:

- 1. Minutes November 15, 2012 for approval
- 2. Introduction of new ERC members & Staff
- 3. Chris Boswell—Legislative Update
- 4. UW Foundation Update
- 5. Division Updates
 - a. Outreach—Mary Byrnes
 - b. Research—Diana Hulme
 - c. Academics Mark Northam
- 6. Budget Mark Northam
- 7. Internal Audit Mark Northam
- 8. EIC (Energy Innovation Center)—Mark Northam/Diana Hulme
 - a. Update, 3-D Visualization Center, Collaboration Center, Occupancy
- 9. Ribbon Cutting
- 10. WYCUSP Update Ron Surdam
- 11. Energy Engineering Research Facility update Mark Northam
- 12. UW's Response to the Tier One Status for the Engineering College- Rob Ettema
- 13. Executive Session Personnel Matters
- 14. New Business Directions for next meeting
- 15. Election of ERC/ACTTF Officers

Agenda - March 20, 2013 - for approval

Action Taken: A motion to accept the agenda for the March 20, 2013 was made by Tom Lockhart, seconded by Carl Bauer. It passed unanimously.

Minutes - November 15, 2012 - for approval

Action Taken: A motion to accept the minutes from November 15, 2012 was made by Carl Bauer, seconded by Paul Lang. It passed unanimously.

Introduction of new ERC members & Staff

Chairman Harper introduced new members Senator Jim Anderson, David Emery and Tom Botts. Diana Hulme introduced Abby Scott as SER's newly hired Assistant Research Scientist.

Chris Boswell-Legislative Update

Chris Boswell first discussed HB No. 0001, section 067 which deals with the legislature requesting a new method of reviewing staff hires at SER. The bill asks the trustees of UW, no later than October 31, 2013, to report to the joint interim committees of 1) minerals, business and economic development, 2) education and 3) appropriations to "provide recommended changes to either existing legislation or university regulations implementing the following management changes: (iii) report on the current practice of selection and retaining staff assigned to the School of Energy Resources, and recommend a policy which provides an approval and review process of the school staff by the Energy Resources Council." Dave Palmerlee asks who is considered "staff" and Chris said that is a question that needs to be reviewed.

Chris then discussed HB No. 0001, section 2 which relates to budget cuts. The governor proposed, and the legislature approved, a cut of 6% for FY14 which means \$612,000 for SER spread over 2 yrs. (this is a reduction to the \$20M budget). The legislature approved a 1% retention bonus for UW employees to be paid in October 2013 with a maximum of \$1,200 as a one-time bonus. Chris said that SER will likely be asked at some point to outline how they might reduce their budget by 2, 4, and 6%.

HB55, the Energy and Natural Resources Education Initiative, has been allocated \$75,000 from the Governor's office which proposes to expand K-12 education in energy and natural resources.

<u>UW Foundation Update—Ben Blalock & Mark Northam</u>

Ben Blalock discussed the coordination of the fundraising efforts with respect to the engineering building. These activities include a vision for Energy, Engineering, Science, Technology, Engineering and Math integration Energy Engineering Research Facility (EERF). As of right now, the Foundation has announced that \$11M has been raised which will become \$22M through the state matching program. The Foundation will continue to work closely with the task force and the

ERC to continue to think through the coordination opportunities between all related facilities in this plan.

Division Updates

Outreach—Mary Byrnes

Mary discussed the water-energy nexus workshop in coordination with the College of Business Marketing and Management Department, April 17, 2013. This event is an invitation-only event seeking participation from upper-management personnel representing energy companies from around the region. Participation is expected to be around 50 people. Mary also discussed the collaboration with Danish Technology University (DTU) and Jonathan Naughton's Wind Energy Research Center (WERC) to host a conference on wind energy technologies in October 2013 in Laramie, WY.

Mary mentioned that SER, CERC, CSIRO and the University of Queensland have begun discussions about the 2014 International Advanced Coal Technologies Conference in Queensland in March of 2014.

SER continues to support Mohammad Piri's workshops in unconventional reservoir research; these are technical workshops being held throughout 2013.

Mary also noted that the Clean Coal Symposium in take place on August 22, 2013, one day prior to the August ERC meeting.

SER is also looking to collaborate with the Rocky Mountain Energy Bar Association to host an "Energy Legal Landscape of Wyoming" event with the College of Law to host a roundtable discussion on oil and gas extraction challenges and opportunities and also an event focused on the technical aspects of hydraulic fracturing—as a follow up event to the hydraulic fracturing forum hosted by SER in 2011.

SER Outreach is also in the process of scheduling speaker series presentations throughout the remainder of the spring semester and again throughout the fall semester.

Chairman Harper asks about the white paper from the Gillette coal conference-- Mary will follow up with Tim Considine.

Research-Diana Hulme

Diana provided an overview of the In-Situ Recovery of Uranium Research Program that was established by legislation in 2009. From the original \$1.6M appropriation, \$189,700.07 has been spent on outreach activities \$1,405,406.00 has been distributed to 7 research projects through a competitive proposal process and \$4,893.93 remains in the fund to be used to hold a research conference upon completion of the research projects.

Chairman Harper asks about the uranium RFPs, what exactly are we getting from these? Diana said that the the majority of awarded researchers are looking at water restoration and water treatment

technologies, bioremediation. Before we send out these RFP, we talk with industry to find out what their central concerns are. Chairman Harper asks, from a communications standpoint, are we communicating with industry and the legislature what we're doing with this money? Mark Northam clarifies that SER is not able to report on the work of the principal investigators until the final symposium, because the work belongs to the researchers. Ron asks that perhaps SER could provide some form of update to better inform. Mark said the annual Wyoming Mining Association conference in June is a good opportunity to relay information about what is going on with this uranium research.

Jim Anderson asked about future opportunities for value added products with uranium production. Mark Northam supports further investigation into this, that SER has long been interested in the opportunity here.

SER continues to fund energy-related projects through the Matching Grants Fund (MGF). Three research Centers of Excellence – the Center for Fundamentals of Subsurface Flow, the Center for Photoconversion and Catalysis and the Center for Energy Economics and Public Policy – have funded research projects in their area of expertise using SER funds.

Academics — Mark Northam

Mark discussed the Center for Innovation for Flow in Porous Media; SER has been working with Dr. Piri on this over the last 6 months. The mission of the center will be to significantly advance the state-of-the-art knowledge of multi-phase flow and transport in porous media. He will be traveling to visit Saudi Aramco, hoping they will be a founding partner. Mark noted that they are working on a group of additional collaborators for the center including Imperial College in London (MOU in progress), Stanford, U of Texas, and Princeton.

Mark also provided an update on the Energy Resource Management and Development (ERMD) B.S. degree program. The ERMD program has 23 seniors, 11 of which will be graduating in May. Six of May graduates have job offers. The current student demographics of the ERMD program are: 10 female, 46 male, 33 from Wyoming, 21 from out of state, 2 international students (Australia and China). The Landman certification program is underway

Mark then touched on the recruiting of faculty noting that current starting salaries are well below average. He said that SER will to continue to struggle to find quality people because of this. Don Roth and Mark approached the Deans and Directors board for consideration of a different compensation scheme based on performance.

Budget - Mark Northam

Mark discussed the FY 2013/2014 SER budget noting that the \$612,000 reduction we need to make in FY14 has been achieved through cuts in FY13 and FY14. Almost all of this has come out of the funding originally allocated to the Center Of Excellence

Dave Palmerlee thinks the issue of hiring faculty should be brought up to BOT and new UW president. He believes the problem needs to be addressed or the goals UW (EERF) will not be realized.

Jim Anderson supports Dave's comment.

Internal Audit - Mark Northam

Kathleen Miller is the auditor looking over SER's accounting. She will report directly to the BOT on May 9, she will be at the May 17 ERC meeting to provide a report.

EIC (Energy Innovation Center)—Mark Northam

Mark provided an update on the installment of the 3-D Visualization Center, the completion of the Collaboration Center.

Ribbon Cutting - Chris Spooner

The Foundation and SER are still waiting to hear from Presidents office to solidify a date.

WYCUSP Update - Ron Surdam

Ron Surdam updated the Council on the progress of WYCUSP.

Energy Engineering Research Facility update - Mark Northam

Rob Ettema gave a presentation in response to recommendations by Governor Mead's Energy, Engineering, and STEM Integration Task Force. Rob outlined the task force's recommendations which include the following:

- define areas of excellence,
- improve integration across colleges and facilities at UW,
- improve and enhance undergrad curriculum,
- · improve the number and quality of faculty,
- improve inflow of quality students,
- improve connections with industry and alumni,
- invest in facilities enabling the recommendations, and leadership, execution and accountability.

Rob discussed "UW areas if distinction" in energy, earth science and technology, computational science and technology, water resources, environment and natural resources and life sciences. He emphasized the need to leverage expertise, improve internship opportunities, and foster entrepreneurship through improved industry and agency partnerships. He stressed the need for metrics that set goals and monitor progress. Rob further noted the need to strengthen collaborations with SER, especially in research and with the centers of excellence.

Jim Anderson asks that Rob's PPT be put in front of Minerals committee, the legislature needs to hear the concerns about retainment, we are comparable in recruiting and starting salaries but fall off later on—our faculty I being taken by more prestigious and higher paying universities.

Executive Session - Personnel Matters

Election of ERC/ACTTF Officers

Carl Bauer nominated Paul Lang for ERC Chairman, Tom Lockhart seconded. It passed unanimously.

Jim Anderson nominated Tom Lockhart as ERC Co-Chairman, Paul Lang seconds. It passed unanimously.

Dave Emery will be taking Ron's position on the ERC after May 1, 2013.

Next Meeting:

May 17, 2013, EIC

Meeting adjourned at 1:30pm

Respectfully Submitted:

Paul Lang Chairman Tom Lockhart Vice-Chairman