

Energy Resource Council Meeting Minutes

Laramie Hilton Garden Inn

UW Conference Center, Salon F&G

May 27, 2011

8:00 a.m. – 10:55 a.m.

ERC Members Present:

Tom Lockhart, Paul Matheny, Paul Lang, Rob Wallace, Indy Burke, Kit Jennings, N. Maha Mahasanen, Tom Buchanan, Dave Palmerlee

ERC Members Absent:

Carl Bauer, Jim Kleckner, Ron Harper

SER Staff in Attendance:

Mark Northam, Mary Byrnes, Diana Hulme, Cath Harris, Sarah Schultmeier, Rob Hurless

Others Attending:

Shawn Reese, Policy Director, Governor's Office

Carrick Eggleston, Assistant Director, Center for Photoconversion and Catalysis

David Bell, Associate Professor, Chemical and Petroleum Engineering

Colin McGee, Governor's Office

Richard Garrett, Wyoming Outdoor Council

Don Richards, UW Government Affairs

Alexandra Andreevna Sukhomlinova, Laramie Boomerang – news reporter

Jay Puckett, Professor, Civil/Arch Engineering – Dean's office

Action Items from Meeting:

- Strategic Plan:
 1. ERC to provide Mark additions and revisions to the May 27th draft of the strategic plan by June 10, 2011.
 2. SER will develop tactics for the strategic plan by working with the deans and department heads from June 7-July 8, 2011.
 3. SER will work with Old Main to analyze the strategic plan and incorporate it into the FY 2013-2014 budget request.
 4. An updated draft of the strategic plan will be sent to the ERC by August 12th which will incorporate the deans and department heads contributed information.
 5. Inclusions to address within the strategic plan:
 - A section to address the economic benefits and return on investment to Wyoming under the strategic plan;
 - synthetic natural gas;

- coal-to-chemicals;
- coal-to-liquids;
- conventional and unconventional energy storage;
- Photovoltaics;
- decrease of water usage in solar energy production;
- address water requirements in all technical areas in the strategic draft.
- Clean Coal Task Force member at the legislative meeting to help in the presentation of the strategic plan to the legislators. SER will remind the ERC of this opportunity as it gets closer to the report date. (September 14-15, 2011)
- SER will put together a draft abstract to address Dave Palmerlee's suggested effort of a Natural Resources & Policy Center to include the Institute of Environment and Natural Resources, College of Law, College of Business and SER for discussion for the August 26, 2011 meeting to address Dave Palmerlee's law initiative.

Agenda: (Appendix A)

Meeting commenced at 8:00 a.m.

Tom Lockhart called the meeting to order and conducted the meeting.

Introduction of New Members

Summary: Tom Lockhart introduced new members: Wyoming Senator Kit Jennings; Paul Matheny, Vice President of the Rockies Region for QEP Resources, Inc.; and Dave Palmerlee, UW Board of Trustee. Shawn Reese, Wyoming Governor Mead's Policy Director and Diana Hulme, Associate Director of Research, SER were also introduced to the council.

Approval of Minutes: November 19, 2011 & January 28, 2011- (Appendix B and C)

Summary: The minutes for November 19, 2010 and January 28, 2011 (Teleconference meeting) were open for discussion. Paul Lang addressed the first sentence in paragraph 1 on page 4 under "Budget" in the January 28, 2011 minutes, and asked it be removed, since it has not been determined if AML funds will be available in the future or not.

Action Taken: Paul Lang moved that the sentence on page 4 of the January 28, 2011 minutes be removed, and Rob Wallace seconded it. Motion was unanimously passed.

Paul Lang moved to accept the November 19, 2010 and January 28, 2011 minutes which was seconded by Maha Mahasanen, motioned carried and the minutes were approved as amended.

Review Forward Looking Strategy – 5 Year Horizon: Consider for Approval – (PPT. - Appendix D) (Strategic Plan Draft - Appendix E)

Summary: Mark Northam used a PowerPoint presentation to guide the discussion of the draft strategic plan which included the history of SER, mission, vision and strategy moving forward. SER's vision for energy programs at UW are characterized to be "balanced" and "distinguished."

SER will be focused on investing in three key areas: unconventional reservoirs, climbing the value chain, and wind and solar. The ERS degree program would distinguish UW in academics. The SER Centers of Excellence and the research facilities at the new ERC building will help distinguish Wyoming in the energy arena through faculty expertise, research and outreach. The HPG/ATC gasifier and the Clean Coal Technology Research Fund are examples of research focused on unconventional reservoirs, along with the future development of an Advanced Oil and Gas Research Center. This center will not duplicate efforts with EORI. Nuclear/uranium would also be a future center consideration.

The photovoltaic work of Bruce Parkinson, Director of the Center for Photoconversion and Catalysis is what distinguishes Wyoming in solar energy research. Parkinson's research includes work with low cost materials which would decrease cells and increase efficiency of conversion. Leading and investing in the areas of academics, research facilities, research and outreach would distinguish UW energy programs from others. The elements to achieve and support the strategy vision include: faculty, leadership and support expertise, oil and gas research facility and a wind and solar research facility, a timeline, a budget, and a list of the benefits to Wyoming.

Endowment chairs will not be part of the strategic plan.

The short timeline to finalize the strategic plan was discussed and determined to be doable with an aggressive calendar.

Action Items: Next steps of the strategic plan include:

- ERC members will submit additions and revisions to be sent to Mark by June 10, 2011.
- SER will develop tactics for the strategic plan by working with the deans and department heads of UW Colleges from June 7-July 8, 2011.
- SER will work with Old Main to analyze the strategic plan and incorporate it into the FY 2013-2014 budget.
- The draft will be sent to the ERC as soon as possible once the deans and department heads have contributed information and provide the ERC time to have industry input added to the strategic plan.
- The draft will include economic benefits to Wyoming.
- Synthetic natural gas, and coal-to-chemicals, coal-to-liquids, conventional and unconventional energy storage, PV, opportunities to decrease water usage in the

production of solar energy will be included in the plan. Water consumption and usage considerations will be included in all technical areas of the strategic plan.

Action Taken:

- A motion was made by Kit Jennings to approve the draft strategic plan and go forward with its direction. The motion was seconded by Paul Lang, and unanimously passed.

Budget: Review and Discussion - (Appendix F)

Summary: An overview of the base budget was given including funds available for redistribution and funding to each college by fiscal year. Funds for redistribution are funds that have been budgeted for matching grant funds and opportunities that may not come to fruition. These funds will be reviewed quarterly and redistributed if they have not been spent.

Updates

a. Carbon Management Institute (WYCUSP) - (Appendix G)

Summary: Rob Hurless gave an update which included: the WY-CUSP site characterization, the transition phase, and CO₂ storage demonstration.

b. Center for Photoconversion and Catalysis - (Appendix H)

Summary: Carrick Eggleston gave an update on the center's activities.

c. Energy Resources Center

Summary: Northam discussed the new building and the importance of the areas of industry collaboration, 3D visualization, the student center and research collaboration.

d. Academics - (Appendix I)

Summary: Northam highlighted the areas in academics which included: The Nielson Fellowship awards, the ERS degree program, and the Energy Resource Science Master's program.

e. Research - (Appendix J)

Summary: Diana Hulme gave an update which emphasized: the Matching Grants Fund, the Clean Coal Technology Fund, the Centers of Excellence and the In-situ Recovery of Uranium Technology research proposals.

f. Outreach – (Appendix K)

Summary: Mary Byrnes featured the website developments, branding, the College of Law efforts, and upcoming events.

SER has been talking with Philippe Chino, President of the Gillette Economic Development Association to discuss collaboration between the Gillette and Laramie areas. The “Energy Boom of Sublette County Oral History Project” will also be presented in Gillette on a date yet to be determined.

Tom Lockhart recognized Senator Jennings’ past contributions to the Outreach part of the vision of SER.

g. Review Legislative Report Timelines – (Appendix L)

Summary: A timeline was discussed for the SER annual report and the Clean Coal Technology Fund.

Action Items: To have a Clean Coal Task Force member at the legislative meeting in October to help in the presentation of the report to the legislators. SER will remind the CCTF of this opportunity as it gets closer to the report date.

Other Business

Natural Resources Law & Policy Center

Summary: Dave Palmerlee suggested greater collaboration between the College of Law and SER in relationship to energy law. Dave is working on an initiative with the College of Law that proposes a Natural Resources Law & Policy Center. The goal of this initiative is to enhance the natural resources component of the College of Law and produce natural resources law graduate students who will work in law firms, energy companies, and state and federal agencies, and who will eventually participate in energy policy at the national level. The initiative would develop interdisciplinary natural resources law and policy capabilities within the university, and provide outreach to state government, citizens of Wyoming and the natural resources industry. The interdisciplinary component would be in collaboration with the Institute of Environment and Natural Resources, College of Law, College of Business and SER.

SER is currently working with the College of Law on a Center of Excellence that would focus on energy, land and water law. This summer SER is working with Governor Freudenthal and law students to see what this might look like going forward. Dean Easton is also involved.

Dennis Stickley, Visiting Professor of Law, employed through SER, has worked with issues on energy and law since his arrival here in 2009 to bridge gaps between law and energy.

Indy Burke, Director of IENR, explained that IENR offers a joint masters and JD funded by SER, and Northam added that the college of law is also incorporated in the SER Energy Resource Science degree program as beginning steps of this partnership.

Action Items: SER will put together a draft abstract of next steps for the ERC August 26, 2011 meeting.

Next Meeting

Next ERC and CCTF meeting will be on August 26, 2011, with a CCTF symposium on completed clean coal projects tentatively set for August 25, 2011. SER will work to convene this symposium on the August 26th, if at all possible, so ERC/CCTF members can attend all in one day.

Meeting adjourned at 10:55 a.m.

Respectfully Submitted:

Ron Harper

Tom Lockhart