Energy Resources Council Meeting Minutes

August 26, 2011 UW Conference Center, Salon F&G 8:00 a.m. – 12:15 p.m.

ERC Members Present:

Ron Harper, Tom Lockhart, Carl Bauer, Paul Matheny, Paul Lang, Indy Burke, Kit Jennings, Tom Buchanan, Dave Palmerlee

ERC Members Absent:

Jim Kleckner, N. Maha Mahasenan, Rob Wallace

SER Staff in Attendance:

Mark Northam, Mary Byrnes, Diana Hulme, Don Roth, Pam Henderson, Cath Harris,

Others Attending:

Ron Surdam, Shanna Dhal, Ramsey Bentley, Mike Massey, Carol Frost, Jane Canton, E.G. Meyer, John Iaio, Susan Weidel

Action Items from Meeting:

- a. Strategic Plan:
 - Mark will review salary assumptions on paying center directors more than faculty
- b. UW BOT will review the WYCUSP request to move forward with test injection of 5,000 tons of CO2 at their next meeting, Ron Surdam will attend to explain. The BOT will make a decision on the liability issues. Ron Surdam will supply a budget for the test injection of 5,000 tons of CO2 removing the already approved budget per the July 28th meeting of the ERC (\$3.4M for the completion of the well for injection).
- c. SER will work with the College of Law and the College of Business put together a plan for the Energy Regulation, Law and Policy Initiative

Agenda: (Appendix A)

Meeting commenced at 8:00 a.m.

Ron Harper called the meeting to order and conducted the meeting. The Chairman noted that Bill Gern will be attending the ERC meeting and will discuss the GE project and also the CCTF meeting item of contracts.

Approval of Minutes: May 27 and July 28, 2011 (Appendix B and C)

Summary:

Action Taken: Minutes for May 27 and July 28, 2011 were approved.

Review Strategic Plan (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 has been adjusted per the ERC meeting of May 27, 2011, reviewed by the UW BOT.

Elements of Implementation:

• Quick-start – through recovered funding from SER quarterly budget sweeps investment it in this strategy will be immediate by working with industry to identify disciplines where we can partner such as: professionals from industry partners to team teach with our faculty; courses to distinguish our programs via end of career professionals; share real-world knowledge; providing mid-career people training to ready their move into next level of management; participate in business curriculum in an MBA and energy economics and management programs; work with faculty on research projects; up to 8 new faculty positions will be added; 2 new centers of excellence created with will target senior scholars with national/international reputations and move their programs to UW. Budget will include salary and start-up funding; target hiring. Need dedicated leadership for 2 new centers of excellence.

Budget: Review and Discussion - (Appendices F & G)

Summary: Mark reviewed the FY 13-14, (Appendix F) budget narrative for the base budget and also the exception budget for the strategy. Tom Buchanan explained that the UW BOT took action to endorse the base funding of SER (\$20.4M) to come from General Funds which will remain separate from the UW Block Grant, while the exception funding request for the strategy was forwarded by the UW BOT since this request will be made from ALM funds and is the prerogative of the Governor.

Mark reviewed the current biennium funds (Appendix G) and explained that direction to spend old money first (FY10) on opportunities to enhance assets for research such as: Piri's phase 2 program lab which will put him 2 years ahead of his original plan. SER will continue to look for new opportunities; reviewing accounts monthly to calculate burn rates and challenging directors on how money will be spent; catch up or revise their budgets and deploy funds to the best result.

<u>Updates</u>

a. Carbon Management Institute (WYCUSP) - (Appendix H-set)

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

The large rig was on site 6/15/2011, drilled and cased to 9,050 feet with a good confining layer. There has been 120 feet of core taken out of the confining layer. Recovered 916 ft of core and hit D on 8/2/2011. UW – WYCUSP is the first to drill test well. This site is showing to be best documented potential carbon storage site in the world. The Rock Springs uplift is a potential site for storage of CO2 for EOR. There are discussions for a future design of a CO2 pipeline infrastructure system. This site also will provide research opportunities for reservoirs of conventional and unconventional hydrocarbons. Overall this project provides an opportunity for UW to be internationally recognized.

Shanna Dahl reported the WY-CUSP budget. DOE funding will be spent within the next 6 months

Rest of expenditures will be spent on analysis, expenditures are close to projections and \$1.9 million has been spent on the well to date.

Ron Surdam discussed the Attorney General Opinion (Appendix I):

The Class I injection well permit application was submitted to the WY-DEQ and is out for public review. CMI will be notified on September 5 if the permit will be granted. Baker Hughes has prepared a plan to complete the well as an injection well. The well will be temporarily abandoned while it will take 4 to 6 weeks for lead team and materials to arrive. (See Ron Surdam's letter dated 8/26/11).

CMI requested the ERC to approve authority to expend \$9 million of \$45 million dedicated to WY-CUSP. Ron noted that approval was given to complete the well as an injection well on July 28, 2011 by the ERC (\$3.4 M was approved on July 28, 2011 by the ERC with the AG's opinion). Ron Surdam asked the ERC for approval to inject CO2. The request was made for \$5 million to conduct CO2 injection tests. The CO2 is from PraxAir in Rock Springs; costs includes topical equipment and installation; CO2 is not competing with EOR and the identified CO2 is food grade quality.

The ERC discussed the pros and cons of injection. The AG's opinion leads an interpretation that the test well could be injected with CO2 to collect data on suitability of the pore space. However, Sue Weidel suggested that the AG's opinion is not clear and that the injection test phase could not go forward without notice to the 3 legislative committees.

Tom Buchanan suggested that the UW BOT review the AG's opinion as the UW is liable for any action of the WY-CUSP. Additionally the ERC is provided legal guidance by the UW General Counsel as is the UW BOT. The next UW BOT meeting is September 7-8, 2011. This review would be in time to report out the UW BOT findings to the Joint Minerals committee meeting to be held on September 12, 2011.

Mark Northam summarized that a process delay does not build risk into the project as the permit for injection is good for one year. He suggested that the delay is warranted to properly review the governing processes.

Action: Jennings moved to have the UW BOT provide their willingness to move forward with CO2 injection and provide guidance on next steps if injection is approved. Seconded by Matheny. Motion was approved.

At Carl Bauer's request for clarification of the motion, discussion derived that the July 28, 2011 meeting allowed for \$3.4M to be spent to complete the well for injection. The action of July $28^{\rm th}$ was left unchanged and CMI may complete the well for injection.

Ron Surdam will prepare a budget for moving forward with the WYCUSP as a test injection well.

b. HPG-ATC - Bill Gern

Summary: Bill Gern provided the council a copy of the Governor's press release regarding the HPG-ATC project hold period decision. Bill Gern reviewed the reasoning behind the "18 month hold period" invoked by GE, primarily due to: lack of federal energy policy and lack of carbon management policy; public utilities are finding it difficult to finance new coal fired power plants, large amount of unconventional natural gas entered market place and many are switching to natural gas. GE still wants to complete the project relative to coal projects coming back online. Rick Miller and Susan Weidel are preparing a modified joint implementation agreement with GE for agreement by both parties which will cover all legislative and air quality permit considerations. GE, UW and the Governor will need to agree to sign the agreement. To date \$2.625 million has been spent by UW and it is estimated that between \$6 to \$7 million will be sent to GE to cover all joint expenses once the project comes out of "hold" status, for a true up to meet the 50/50 partnership. GE has spent \$12.5 million to date. Gern noted that the escape clause was at the end of the design period the design phase has been completed. Design entities have been paid.

Further report will be made to the Minerals Committee on September 12th.

c. Academics - (Appendix J)

Summary: Don Roth reviewed proposed changes for the ERC degree including the degree name change, "Energy Resource Development & Management", which will be proposed to the BOT in November, 2011. Other changes include a redesign of the curriculum to reflect student learning outcomes aligned with workforce demands.

d. Research -

Summary: Diana Hulme reviewed the next steps for the release of Uranium RFP and requested guidance on the release date. Legislation will be proposed by the Minerals committee to increase the reversion date by one year (June 30, 2014). The council advised Diana to wait for the legislation outcome on the extension date before releasing the next RFP.

e. Outreach - (Appendix K)

Summary: Mary reviewed the preparations of the Hydraulic Fracturing Forum and also reported of working with Phillip Chino, ED of the Campbell Economic Development Corporation for an energy conference to be held in Gillette. Mary will follow up with the plans for the energy conference and address any issues of sponsorship suggested by Kit Jennings.

f. Proposal for Energy Regulation, Law and Policy Initiative -

Trustee Palmerlee presented the "Energy Regulation, Law and Policy Initiative" to the ERC. He observed that the regulatory, legal and policy environment coming out of Washington creates unending barriers and roadblocks to sensible and balanced development of Wyoming's natural resources. He went on to point out that UW and the State need to have an ongoing capability and presence in monitoring, understanding and development of these important legal, policy and regulatory matters that have such a critical impact on Wyoming.

Therefore, the UW administration is proposing an "Energy Regulation, Law and Policy Initiative" within SER that would encompass the regulatory, legal and policy aspects of traditional and emerging energy technologies, natural resources development and the related environmental aspects. The goal of the Initiative is to develop interdisciplinary Energy Regulation, Law and Policy capabilities within SER and the University as a resource for state government, the citizens of Wyoming and the energy industries in Wyoming.

Following the discussion of the Initiative, Tom Lockhart made and Kit Jennings seconded the following motion which was unanimously passed by the ERC:

ERC endorses the creation, funding and implementation of an Energy Regulation, Law and Policy Initiative and that ERC asks the Director of SER to develop a detailed plan for implementation of this Initiative and to bring back to the ERC for review, discussion, modification and approval.

Action Items: SER will work with the College of Law and the College of Business put together a plan for the Energy Regulation, Law and Policy Initiative.

Next Meeting

Meeting adjourned at 12:15 p.m.

	Next ERC and CO	CTF meeting	will be on No	ovember 18,	2011.
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Respectfully Submitted:	
Ron Harper	Tom Lockhart