

**Minutes of the UW Energy Resource Council
September 21, 2007**

Members present:

Ron Harper – CEO & General Manager, Basin Electric Power Coop, (Council Chairman)
Paul Lang – President Western Operations, Arch Coal Inc.
Representative Tom Lockhart (Council Vice Chairman)
Keith Rattie – Chairman, President & CEO, Questar Corporation
Rob Hurless- Energy and Telecommunications Policy Advisor
Harold Bergman - Ex officio, Director, RIENR
Rob Wallace – Manager, Government Relations, G.E. Energy

Members absent:

Senator Charles Townsend
Tom Stroock – CEO, Alpha Development Corp; former US Ambassador
Tom Buchanan - Ex officio, UW President
Bobby Shackouls – Chairman, Burlington Resources Inc. (retired)

Welcome and Approval of the Agenda and Minutes

Chairman Ron Harper called the meeting to order at 9:00 am. Tom Lockhart motioned and Paul Lang seconded the agenda and minutes be accepted. The motion was passed unanimously. (Agenda-Appendix A) (Minutes 5/25/07-Appendix B)

Introduction of SER Director, Mark Northam

Each council member and new Director, Mark Northam gave a brief introduction of themselves.

ERC and Director Roles and Responsibilities/Expectations

A discussion arose of expected meetings and updates that would be made by Northam. Rattie summed up his understanding laid out by the Governor that the Council's role is to be available to help the School of Energy succeed. Northam would like the ERC's advice for maximizing the financial gifts given to the school. Northam would like to use technology to communicate with the council regularly on the design of the new building. Wallace stated he would like to aid the school and Northam in the areas of wind energy.

It was determined that the Council would have scheduled quarterly meetings, with one of those being a conference call meeting, and updates from Northam in between. One of the quarterly meetings will be held in conjunction with the UW Board of Trustees.

ERC Membership and Leadership Selection Procedures

Chairman Harper stated he would write a position policy and get it out to all of the Council. It would be based on the election of ERC officers every two years. The question was raised on the filling of Mark Davies' position with his move to the U.K, and was answered by Representative Lockhart stating interim appointments can be made, but would ultimately need Senate approval. Lockhart provided information on how this process could work. (Appendix C) Ron Harper stated that he has had a discussion with the Governor with respect to a new appointment. The Governor expressed that he was looking at options.

Update of Professorship Searches

Northam gave an update on the ongoing searches for professorships including the hiring of mathematician, Felipe Pereira. Northam has just initiated a search for Chemistry, an Arid Lands Reclamation Ecologist, and a future wind specialist. Northam is also in hopes of including someone in Energy Policy to address land management issues. Start up packages for these positions must be competitive to attract essential candidates.

Update on NCAR

Myron Allen, VP of Academic Affairs, gave an update on the progress of the super computer. NCAR will be housed outside of Cheyenne, and is waiting for NSF funding to begin building.

Update on Academic Activity

One of Northam's top priorities will be in hiring an Academic Coordinator. Northam has enlisted the help of the Academic Council, and would like this to be a full time position, in hopes of a curriculum in place by fall of 2008.

Update on Matching Grant Funds

Pam Henderson gave an update on matching grant funds. (Appendix D)

Update on Fundraising

Chris Spooner from the Foundation gave an update. (Appendix E)

Update on Financial Report

Sarah Schulmeyer gave an update of expenditures through August 31, 2007. (Appendix F) Representative Lockhart raised his concern of SER becoming part of the "block grant" within the university at the end of this biennium. Rick Miller, VP of Govt. and Community Legal Affairs, stated that it was his understanding that SER would be a separate entity within the financial structure of the university.

Discussion of Drafted Annual Report

Northam will give an executive summary of the School of Energy's annual report to the Wyoming Minerals Committee on Wednesday, September 26. A motion was made by Tom Lockhart to accept the draft of the annual report, and seconded by Paul Lang. The report will be available on the School of Energy's website. www.uwyo.edu/ser/

Wyoming Infrastructure Authority

Steve Waddington from WIA requested the council to consider three items:

- That the ERC, along with Western Research Institute, and WIA put together a communication strategy to the public for the building of the infrastructure.
- That there would be collaboration on an RFP.
- That the Board of WIA meets with the ERC.

Chairman Harper stated the council would discuss these items and get back to him.

Action Items

Chairman Harper will write a position policy and distribute to council members.

Discussion with council about involvement of WIA.

A calendar will be drafted with 2008 meeting dates.

Future Meetings

The next ERC meeting will be in Laramie on Friday, November, 16. There will be a joint meeting with the University of Wyoming's Board of Trustees in the morning session.

Tom Lockhart made a motion to adjourn the meeting, and Keith Rattie seconded it. The meeting adjourned at approximately 11:50.

Respectfully Submitted

Ron Harper, Chairman

Appendix A

Agenda – September 21, 2007 Energy Resource Council Meeting

- 1) Review of minutes from 5/25/07.
- 2) Introduction of SER Director Mark Northam
- 3) ERC and Director Roles and Responsibilities/Expectations
- 4) ERC membership and leadership selection procedures
- 5) Update on professorship searches
- 6) Update on NCAR
- 7) Update on academic activities
- 8) Update on Matching Grant Funds
- 9) Update on fundraising
- 10) Financial Report
- 11) Discussion of Draft Annual Report
- 12) Upcoming meetings- November 16, 2007, Joint meeting with Board of Trustees.
Set 2008 meeting dates.

Appendix B

Minutes of the University of Wyoming ERC Meeting May 25, 2007

Members present:

Ron Harper – CEO& General Manager, Basin Electric Power Coop, (Council Chairman)
Senator Charles Townsend
Paul Lang – President Western Operations, Arch Coal Inc.
Representative Tom Lockhart (Council Vice Chairman)
Keith Rattie – Chairman, President & CEO, Questar Corporation
Bobby Shackouls – Chairman, Burlington Resources Inc. (retired)
Rob Wallace – Manager, Government Relations, G.E. Energy
Rob Hurless- Energy and Telecommunications Policy Advisor
Ex officio, RIENR Director Harold Bergman

Members absent:

Mark Davies – General Manager, Rio Tinto Energy America
Tom Stroock – CEO, Alpha Development Corp; former US Ambassador
Ex officio, UW President Tom Buchanan

Welcome and Approval of the Agenda and Minutes

Chairman Ron Harper called the meeting to order at 10:00. Senator Townsend motioned and Bobby Shackouls seconded that the agenda be accepted. Keith Rattie motioned the minutes be accepted and Tom Lockhart seconded. The motion was passed unanimously. (Agenda-Appendix A) (Minutes 4/27/07-Appendix B)

Status of Director Search

Mark Northam has accepted the position of Director for the School of Energy Resources. He will start at the end of August, and there will be a press release soon.

Chairman Harper and the Energy Resource Council thanked Carol Frost for her hard work and all that she has accomplished in her term of Interim Director for the School of Energy Resources.

Myron Allen, VP of Academic Affairs, thanked the Council for their involvement as well.

Update on the Four Professorship Searches

Frost stated that formal letters had gone out to three of the candidates, and UW is waiting to hear their responses. The initial coal candidate has turned down his offer, making this

an ongoing search. Chairman Harper requested an update on these through the ERC bimonthly update.

Update on Academic Activities

Pam Henderson gave an update on the Energy Summer Institute which would occur June 10- 22. ConocoPhillips would be attending a special session meeting with the high school students on June 13. Henderson will send council members the information on the luncheon planned.

Update on Research Center Development

The SER has provided seed funding to three of the SER research centers:

- Solar and Fuel Cells Group, SER Center for Renewable Energy Resources
Proposal: *Energy Nanoscience: solar cells, fuel cells, and energy storage*
- Sustained Biogenic Production of Coal-Bed Methane Group, SER Center for Coal Bed Natural Gas: *Sustained Biogenic Production of Coal-Bed Methane*
- Wyoming Reclamation and Restoration Center, SER Center for Arid Lands
Restoration Ecology: *Mechanisms by which sagebrush facilitates recovery of disturbed steppe ecosystems*

Update on Fundraising

Ben Blalock gave an update on his meeting with Marathon and Anadarko. Both have stated that the School of Energy Resources can count on financial support. Blalock stated that Ultra has stated SER will have their financial partnership, and ConocoPhillips would provide a financial proposal this summer. BP America is preparing a meeting with the governor, and would announce their commitment to SER at that time. The coal industry will be the next area of funding partnerships the Foundation will embark on.

Update on ENR Activities

Director, Harold Bergman gave an introduction to the Ruckelshaus Institute of Environment and Natural Resources Institute and the Helga Otto Haub School of Environment and Natural Resources. Bergman discussed the school's mission and values, and the institute's interaction and cooperation with their Board.

Financial Report

The financial report was accepted. The question of how the budget would operate in the fiscal year of 2008 was discussed. Myron Allen responded by stating it would follow what is in the academic and financial plan.

Chairman Harper raised the question of what would occur with ERC members Mark Davies and Tom Stroock, whom were designated as one year members. Frost stated that the intention of the governor was to reappoint them.

Future Meetings

It was determined that the ERC would not meet again until the meeting in Laramie on September 21, with the option of Chairman Harper calling a teleconference meeting if necessary.

Keith Rattie requested the ERC prepare a resolution of gratitude to be given to the governor for Carol Frost's distinguished service.

Keith Rattie made a motion to adjourn the meeting, and Shackouls seconded it. The meeting adjourned at approximately 10:40.

Respectfully Submitted

Ron Harper, Chairman

Appendix C

Election of Energy Resource Council Officers 9/20/07

*The current officers were elected at the Organizational meeting in 2006 with out definitive discussion of term of election.

*Legislative members are appointed for two year terms by House and Senate Leaders

*The Governor selects, with Senate approval, the private sector members and they have rotating three year terms

**The above suggests that an appropriate time for elections would be after the Legislative session – Legislative selections and approvals

**Experience would suggest that two year terms would be appropriate for the officers.

**Worth noting – Legislative members may not win re-election or could leave the Legislature for other reasons – Private Sector members may also leave the Council

Term expiration forward)	Council member – Gov appt (3 year terms going forward) Legislator (2 year terms)
2008	Ratie, Shackouls Lockhart, Townsend
2009	Harper, Wallace, Lang
2010	Davies, Stroock

Appendix D

School of Energy Resources
Matching Grant Fund
September 2007

Accepted	PI	Organization	Proposal	MGF Funds
	Bell, David Heller, Paul	Idaho National Laboratory Petroleum Research Fund	Fischer-Tropsch Synthesis & Product Refining Shapes, Scales & Spacings of Channel-Belt Sand Bodies in Avulsion-Dominated Alluvial Basins	\$50,000 \$50,000
	Piri, Mohammad; Tara LaForce	Total E&P UK PLC	Three-Phase Relative Permeabilities for Enhanced Oil Recovery Schemes	\$80,000
	Tang, Jinke	Sharp Laboratories of America	Investigation of Nanospheres for General Lighting Application	\$50,000
	Woods, Dale; James Krall	Blue Sun Biodiesel LLC & Barkley Ag. Enterprises LLP	Plant Pathogen Threat to Oilseed Biodiesel Crop Development in Wyoming	\$16,000
	Argyle, Morris; Tom Barton	Western Research Institute	Integration of a Structural Water Gas Shift Catalyst with a Vanadium Alloy Hydrogen Transport Device	\$100,000
	Campbell-Stone, Erin; Barbara John Johnson, Patrick	Wyoming NASA Space Grant North Central Sun Grant Center Regional Competitive Grants Program	Fault Seal on Low-Angle Normal Faults Recoverable Enzyme Nanoparticle Systems for Cellulose Hydrolysis	\$15,000 \$51,600
			Total Accepted Funds	\$412,600
			# Accepted Proposals	8
Pending	PI	Organization	Proposal	MGF Funds
	Argyle, Morris	Idaho National Laboratory	Nonthermal Plasma Reactors for the Decomposition of Hydrogen Sulfide	\$25,000
	Naughton, Jonathan; Mark Balas Mavriplis, Dimitri	Department of Energy Department of Energy	Aerodynamics & Control of Wind Turbines Sensitivity Analysis for Uncertainty Quantification & Improved Accuracy in Nuclear Reactor Core Simulations	\$100,000 \$72,600
	Bagley, David	Department of Energy	Sustainable Photosynthetic H ₂ Production	\$100,000
			Total Pending Funds	\$297,600
			# Pending Proposals	4
Declined	PI	Organization	Proposal	MGF Funds
	Sullivan, B. Patrick	Department of Energy	Highly Oxidizing Ligand-to-Metal Charge Transfer Excited States for Solar Energy Conversion	\$50,000
	Alvarado, Vladimir	American Chemical Society/Petroleum Research Fund	Dynamics of Solid-Stabilized Macro Emulsions in Porous Media	\$40,000
	Kubelka, Jan	American Chemical Society/Petroleum Research Fund	Petroleum Biodesulfurization: Enzymatic Oxidation of Dibenzothiophenes by Microperoxidase in Non-Aqueous Media	\$25,000
	Sharma, Shikha	ACS-PRF	Tracing Methanogenesis Using Carbon & Hydrogen Stable Isotope Composition of Coal Bed Natural Gas Co- Produced Water	\$20,000
	Dutta, Debashis	American Chemical Society/Petroleum Research Fund	Nanometer Scale Devices for Liquid Phase Analysis of Charged & Zwitterionic Compounds	\$25,000
	Woods, Dale; Justin Moss	North Central Sun Grant Program	Implementation of a Sustainable Agronomic System for Oilseed Crop & Biodiesel Production in a Rural Environment	\$40,000
			Total Declined Funds	\$200,000
			# Declined Proposals	6

University of Wyoming School of Energy Resources Gifts and State Matching Funds

UW School of Energy Resources Center

Donor	Donor Funds Pledged	Wyoming Facility Match Reserved	Donor Funds Given	Wyoming Facility Match In-Hand	Total Funds Pledged and Match Reserved	Total Funds Given and Match In-Hand
EnCana *	\$ 5,000,000	\$ 5,000,000	\$ 1,000,000	\$ 1,000,000	\$ 10,000,000	\$ 2,000,000
Shell	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 4,000,000	\$ 4,000,000
BP America	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 4,000,000	\$ 4,000,000
ConocoPhillips	\$ 290,000	\$ 290,000	\$ -	\$ -	\$ 580,000	\$ -
Total	\$ 9,290,000	\$ 9,290,000	\$ 5,000,000	\$ 5,000,000	\$ 18,580,000	\$ 10,000,000

UW School of Energy Resources Endowments

Donor	Donor Funds Pledged	Wyoming Endowment Match Reserved	Donor Funds Given	Wyoming Endowment Match In-Hand	Total Funds Pledged and Match Reserved	Total Funds Given and Match In-Hand
Jim Nielson **	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000	\$ 5,000,000
Total	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000	\$ 5,000,000

UW School of Energy Resources Research and Teaching Centers

Donor	Donor Funds Pledged	Wyoming Facility/Endowment Match Reserved	Donor Funds Given	Wyoming Facility/Endowment Match In-Hand	Total Funds Pledged and Match Reserved	Total Funds Given and Match In-Hand
BP Wind Research Center ***	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -
Schlumberger ****	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -

Notes:

* In June 2006, EnCana also donated \$2 million - matched to \$4 million - to UW for new petroleum engineering research laboratories.

** Jim Nielson's gift is a charitable remainder unitrust held by the UW Foundation. Income from the gift is paid to him according to an agreement and income from the state match is available to the School of Energy Resources.

*** The precise use of BP's gift for the Wind Research Center has not been determined; therefore, the state matching funds have not been determined.

**** Schlumberger has gifted 30 parallel processing licenses for its Eclipse software to the University of Wyoming Enhanced Oil Recovery Institute. Schlumberger values the three-year licenses and maintenance agreement at \$26.3 million.

Appendix F

School of Energy Resources Expenditure Status Report (as of August 31, 2007)

FY07-08 Budget \$ 12,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures	Cash Balance
ACADEMICS				
Coordinator's Office				
Original Budget	\$132,300	\$765,900		
Expended:				
Salaries & EPB's	(\$98,322)		(\$18,102)	
Support Services:			(\$377)	
Graduate Assistantships			(\$365,844)	
Totals	\$33,978	\$799,878	(\$384,323)	\$415,555
Distinguished Faculty				
Original Budget	\$1,104,000	\$2,208,000		
Transferred				
A&S (Math & Geophysics)	(\$202,955)			
Business (Economics & Finance)	(\$160,000)			
Engineering(Civil & Petroleum)	(\$240,000)			
EPB Account	(\$75,000)			
Support Services:			(\$3,574)	
Distinguished Speaker Support	(\$15,620)			
* Reduction for NCAR	(\$443,549)			
Totals	(\$33,124)	\$2,174,876	(\$3,574)	\$2,171,302
Visiting Professorships				
Original Budget	\$0	\$300,000		
* Reduction for NCAR		(\$300,000)		
Totals	\$0	\$0	\$0	\$0
Teaching Internships				
Original Budget	\$101,000	\$202,000		
Support Services:			(\$100)	
Course Development Awards:				
Chemistry	(\$26,500)			
Civil & Arch. Engineering	(\$7,793)			
Geology	(\$15,000)			
Math T-Shirts	(\$1,025)			
Anne Alexander to China	(\$747)			
Totals	\$49,935	\$251,935	(\$100)	\$251,835
Summer Program for H.S. Students				
Original Budget	\$63,600	\$63,600		
Expended:	(\$60,579)		(\$94)	
Totals	\$3,021	\$66,621	(\$94)	\$66,527
TOTALS Academics	\$53,810	\$3,593,310	(\$388,091)	\$2,905,219

* Total Reduction for NCAR = \$2,000,000

School of Energy Resources Expenditure Status Report (as of August 31, 2007)

FY07-08 Budget \$ 12,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures	Cash Balance
RESEARCH				
Technical & Support Staff				
Original Budget	\$518,550	\$518,550		
* Reduction for NCAR	(\$518,550)			
Totals	\$0	\$518,550	\$0	\$518,550
Half-time Faculty Appointment				
Original Budget	\$410,099	\$820,198		
* Reduction for NCAR	(\$410,099)			
Totals	\$0	\$820,198	\$0	\$820,198
Startup Assistance Fund				
Original Budget	\$500,000	\$500,000		
Zhang startup	(\$110,000)			
Solar & Fuel Cells	(\$71,000)			
CBM Group	(\$77,000)			
Arid Lands	(\$51,500)			
Totals	\$190,500	\$690,500	\$0	\$690,500
Grant Matching Fund				
Original Budget	\$500,000	\$1,000,000		
David Bell	(\$50,000)			
Paul Heller	(\$50,000)			
Mohammad Piri/Laforce	(\$80,000)			
Jinke Tang	(\$50,000)			
Dale Woods/Krall	(\$16,000)			
Argyle/Batron	(\$100,000)			
Campbell-Stone/Barbara John	(\$15,000)			
Patrick Johnson	(\$51,600)			
Obligations	(\$297,600)			
Totals	(\$210,200)	\$789,800	\$0	\$789,800
TOTALS Research	\$277,900	\$2,838,748	\$0	\$2,819,048

* Total Reduction for NCAR = \$2,000,000

School of Energy Resources Expenditure Status Report (as of August 31, 2007)

FY07-08 Budget \$ 12,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures	Cash Balance
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STATEWIDE OUTREACH				
Original Budget	\$561,000	\$777,000		
Support Services	(\$2,741)		(\$407)	
Publications	(\$27,755)			
Stroock Forum - \$26,500	(\$6,341)		(\$20,453)	
WRI- \$201,565	(\$201,565)			
Earthscape-\$7,900	(\$7,900)			
Cost analysis for WIA	(\$26,500)			
AMRA	(\$5,000)			
WCC	(\$10,000)			
Finding the Balance			(\$50,000)	
Reduction for NCAR	(\$253,877)		(\$73,925)	
TOTALS OUTREACH	\$19,321	\$796,321	(\$150,567)	\$645,754

ADMINISTRATION				
Director's Office				
Original Budget	\$513,100	\$513,100		
Salaries, EPB, PT	(\$185,753)		(\$52,293)	
Support Services	(\$97,871)		(\$5,636)	
ERC Support	(\$12,806)			
Furniture			(\$69,153)	
Equipment	(\$12,597)		(\$6,101)	
Director Search	(\$128,301)			
Building Renovations	(\$130,000)			
TOTALS Administration	(\$54,228)	\$458,872	(\$133,183)	\$325,689

Total Appropriation	\$12,071,997
Total NCAR Reduction	(\$2,000,000)
Total Expenditures	(\$3,908,273)
Cash Balance as of August 31, 2007	\$6,163,724