

**Minutes of the ERC Meeting
June 18, 2010**

Members present:

Representative Tom Lockhart (Council Vice Chairman)
Maha Mahasenan – Senior Policy Advisor, Hydrogen Energy
Jim Kleckner – VP of Operations, Anadarko Petroleum Corporation
Senator Charles Townsend
Rob Wallace – Manager, Government Relations, G.E. Energy
Carl Bauer-Retired, Director National Energy Technology Laboratory

Members present on Teleconference

Ron Harper, CEO & General Manager, Basin Electric Power Coop, (Council Chairman)

Members absent:

Keith Rattie – Chairman, President, & CEO, Questar Corporation
Paul Lang – President Western Operations, Arch Coal Inc.
Tom Buchanan - Ex officio, UW President
Ingrid Burke - Ex officio, Director, RIENR

Meeting Attendees:

Mark Northam
Mary Byrnes
Shanna Dahl
Sarah Schulmeyer
Rob Hurless
Don Roth
K.J. Reddy
Shawn Thorson

Welcome and Approval of the Agenda and Minutes

Council Vice Chairman, Tom Lockhart, opened the meeting at approximately 8:30 a.m. with introductions of each member for new council member, Carl Bauer.

Chairman Ron Harper gave a special thank you to K.J. Reddy, who has served as Associate Director of Academics for the past two years in SER. Mark Northam also gave a special thank you to Reddy.

Ron Harper motioned and Jim Kleckner seconded that the 3/26/10 minutes, and the 6/18/10 agenda be accepted. The motion was passed unanimously. (Minutes - Appendix A) (Agenda – Appendix B)

SER Audit Discussion

The Energy Resource Council is in agreement that since the school is a relatively new entity and unique in its structure within the University of Wyoming, along with entering a new budget biennium, it would be appropriate to request an audit of SER. The benefit would be an independent review past accomplishments to aid with future decisions for the school.

Budget Update-Carbon Management

Shanna Dahl, Associate Director of the Carbon Management Center, gave an update. (Appendix C)

Budget Update

Northam gave an update on the budget. (Appendix D) It was pointed out that in our reporting to the JMC, we should highlight the matching dollars that SER brings in through their Matching Grant Program. Northam will provide a copy of the additional matching funds spreadsheet he is working on to Lockhart and Harper.

Fundraising

Ben Blalock gave an update on fundraising. (Appendix E)

Strategic Planning

- Northam gave an update on the progression of the ERC building.
- Commercialization – It was agreed that a formalized plan for commercialization should be achieved by the August 27, 2010 meeting.

Other Business

- Don Roth, Associate Director of Academics, gave an update which included internship development, development of Capstone courses, and a goal of 50 students in the Energy Resource Science (ERS) degree program in two years, the development of a five year Bachelor/Masters degree paired with a faculty member as a mentor.
- Mary Byrnes, Associate Director of Energy Outreach, gave an update which included The International Advanced Coal Technologies Conference, The Uranium Production Conference, Energy Academies, the efforts with compressed natural gas, and the marketing of the SER Research Centers of Excellence.
- David Mohrbacher, Director of Enhanced Oil Recovery Institute, gave an update which included their mission and goals.

Mahasenan requested Byrnes to provide a statement that could be used when the press may contact ERC members.

Action Items

- Northam to send Lockhart and Harper the additional spreadsheet on matching funds and a draft commercialization plan.
- Byrnes to provide a press release to be used by ERC members contacted by press.
- The August 27, 2010 meeting will be in Laramie.

A motion was made at approximately 1:30 p.m. by Tom Lockhart to end the meeting, and the motion was seconded by Maha Mahasenan. The motion passed unanimously.

Respectfully Submitted,

Tom Lockhart, Vice Chairman

APPENDIX A

Minutes of the ERC Meeting March 26, 2010

Members present:

Ron Harper, CEO & General Manager, Basin Electric Power Coop, (Council Chairman)
Representative Tom Lockhart (Council Vice Chairman)
Maha Mahasenan – Senior Policy Advisor, Hydrogen Energy
Ingrid Burke - Ex officio, Director, RIENR
Senator Charles Townsend

Members absent:

Rob Wallace – Manager, Government Relations, G.E. Energy
Keith Rattie – Chairman, President, & CEO, Questar Corporation
Paul Lang – President Western Operations, Arch Coal Inc.
Jim Kleckner – VP of Operations, Anadarko Petroleum Corporation
Tom Buchanan - Ex officio, UW President

Meeting Attendees:

Myron Allen
Bill Gern
Don Richards
Susan Weidel
Mark Northam
Cath Harris
Mary Byrnes
Sarah Schulmeyer
Rob Hurless
Pam Henderson

Welcome and Approval of the Agenda and Minutes

Chairman Ron Harper called the meeting to order at approximately 8:00 am. Chairman Harper stated for the record that at the time the Clean Coal Task Force reviewed and recommended Ciris Energy as a recipient of 2009 Clean Coal funding he had been unaware of any involvement between Basin Electric and Ciris Energy. Harper stated he would recuse himself from any future decisions involving Ciris Energy.

Tom Lockhart motioned and Chuck Townsend seconded that the 1/20/09, the 2/1/10, minutes, and the March 26, 2010 agenda be accepted. The motion was passed unanimously. (Minutes Appendix A & B) (Agenda – Appendix C)

Legislative Session Update

Don Richards gave an update on the legislation that occurred this past legislative session involving the School of Energy Resources. (Appendix D) Chairman Harper requested from Richards a condensed text of the legislation to be provided to members of the ERC.

Susan Weidel gave an update on the liability issues involving the ERC management of the Carbon Management Center. They included the below:

- Coverage through the Wyoming Governmental Claims Act (Appendix E)
- Additional coverage under the Educator's Legal Liability policy

Chairman Harper requested from Weidel the parameters of what constitutes Executive Session, which she will be attaining for the ERC.

New Hires

Northam gave an update on the hiring of Ron Surdam, as the new Carbon Management Director, and David Mohrbacher, the new Director for EORI. (Org Chart for SER, Appendix F) (Org Chart for EORI, Appendix G)

Chairman Harper requested an org chart depicting the reporting structures involving SER and Research Department from Myron Allen.

Budget Update

Northam gave an update on the budget. (Appendix H)

Chairman Harper asked what the UW distribution was for incoming revenues from the commercialization of research and development projects that are funded with funds provided by the SER. Bill Gern responded by directing the ERC to the organization in the university's UniReg 641, which SER will provide to the ERC.

Future Events

Mary Byrnes gave an update on future events. (Appendix I) SER will send the ERC the link for them to register for the Advanced Coal Conference, the Uranium survey information, and previous conference attendance.

Update on Energy Resource Center Building

Northam gave an update on the Energy Resource Center including that the architect and construction company has been chosen.

Fundraising

Ben Blalock gave an update on fundraising. (Appendix J)

Other Business

Northam gave several other updates:

- There is a name change of the Research Centers to "Centers of Excellence"
- There are four new incoming students to the degree program
- Northam will send out an update on his trip to Australia regarding clean coal

Action Items

- Legislative update for missing ERC members
- Text of the liabilities issues and additional insurance policy
- Executive Session guidelines
- Legislation for the budget and authority for EORI and authority for SER

- Organizational Chart of GE under SER
- UniReg 641 in regard to revenue for SER from commercialization of research projects
- Uranium survey information
- Previous conference attendance
- Clean Coal website for ERC registration
- Queensland trip update
- 2010 clean coal rfp.
- The June 25, 2010 meeting has been changed to June 18 in Denver

A motion was made at approximately 10:40 a.m. by Tom Lockhart to end the meeting, and the motion was seconded by Chuck Townsend. The motion passed unanimously.

Respectfully Submitted,

Ron Harper, Chairman

APPENDIX B

Agenda

**June 18, 2010 Energy Resource Council Meeting
Marriott Courtyard Hotel, Denver International Airport
8:30 a.m. – 1:00 p.m.**

- 1) Review of minutes from 3/26/10 and 6/18/10 agenda.
- 2) SER Audit Discussion
- 3) Budget Update – Carbon Management
- 4) Budget Update 2011/2012
- 5) Fundraising Update
- 6) Strategic Planning
 - Commercialization of Technology
 - Measures of Success for SER, Carbon Management, Clean Coal
- 7) Other Business
- 8) Future Meetings: August 27, 2010

APPENDIX C

WY-CUSP Project update – June 10, 2010

Task 1 – Project Management and Planning

PI – Ron Surdam

Task Update

- A monthly meeting with Task Managers was held in the early part of June to share preliminary work and discuss milestones and timelines. Currently, all tasks are on time and progressing well.
- The first quarterly report was prepared and sent to DOE in April.
- The second quarterly report is currently being created and will be submitted prior to the July 31 deadline.
- All necessary reporting for the ARRA funding has been prepared and submitted as well.
- A planning meeting is being scheduled for the latter part of June, with the Director of the UW GIS Center to coordinate integration of project results with NATCARB.
- A preliminary outreach outline has been created to establish the necessary outreach program to work consistently and efficiently with the land owners, lease holders, pore use owners and the general public regarding all aspects of this Rock Springs Uplift Project. The outreach plan includes working with the local government, DEQ, OGCC, BLM, local schools, local media and other appropriate parties to educate them on the Stratigraphic Test Well, EM, and 3-D seismic shoot.
- The permitting process has begun for the Stratigraphic Test Well. Discussions have been held with the OGCC and the DEQ regarding all of the necessary steps to permit the well.

Budget Update

Total Budget - \$837,121

Spent - \$33,948 (Travel, personnel, geophysical analysis)

Remaining - \$803,173

Task 2 – Design and construct a Stratigraphic Test Well on the RSU

Task Manager - Baker Hughes Oilfield Operations Inc.

Task Update

- The final contract for Baker Hughes Oilfield Operations, Inc. is being reviewed by the University of Wyoming legal department.
- Bi-monthly conference calls are being held to discuss progress of the contract, well design as well as any additional areas that need to be discussed.
- Representatives from Baker Hughes have made multiple visits to Laramie to establish good working relationships with the University of Wyoming. The most recent visit was the middle of June to tour the prospective drill site and to work with the Black Butte Mining Company to confirm all of the necessary road/access issues.
- Once the contract is approved Baker Hughes will solidify the lease of a rig and finalize the well design of the Stratigraphic Test Well.
- It will be necessary to determine the owner for the Stratigraphic Test Well prior to the permit being issued.

Budget Update

Total Budget – \$5,542,381

Spent - \$0

Remaining - \$5,542,381

Task 3 – Geophysical characterization of the RSU Test Well site

Task Manager - Subhashis Mallick

Task Update

- The contract with Geokinetics, the company shooting the 3-D Seismic Survey is in the final review process at the University Legal department.
- Once approval is completed Geokinetics will begin preliminary work for the 3-D seismic shoot, estimating to be in the field by mid to late summer.
- Geokinetics hopes to have all necessary permits finalized in the next month.
- The contract with EMTEK America, Inc. has been finalized and is awaiting appropriate signatures from the University of Wyoming and EMTEK America.
- EMTEK will complete the EM Survey and is planning to be in the field the middle of June to conduct a preliminary noise measurement.
- Supporting personnel has been hired.

Budget Update

Total Budget – \$2,811,682

Spent – \$16,352 (Personnel)

Remaining - \$2,795,330

Task 4 – Development of Well catalog and borehole risk assessment

Task Manager - Jimm Myers

Task Update

- The review of pending EPA/WDEQ CCS permit requirements relative to boreholes is in process and is expected to be completed by the end of June.
- Most of the supporting personnel has been hired, anticipating that all remaining personnel will be hired with anticipated start dates of late summer, early fall.

Budget Update

Total Budget - \$433,010

Spent - \$0

Remaining - \$433,010

Task 5 – Structural and stratigraphic characterization

Task Manager – Erin Campbell - Stone

Task Update

- Existing, available data on the Rock Springs Uplift has been located with plans to review all existing data anticipated, late summer.
- All personnel has been hired

Budget Update

Total Budget –\$ 412,035

Spent - \$50,281 (Personnel, travel)

Remaining - \$361,753

Task 6 – Laboratory measurement of containment – mineralization and brine

Task Manager – John Kaszuba

Task Update

- All personnel has been hired and trained on laboratory equipment.
- Preliminary tests have been run using the equipment.

Budget Update

Total Budget – \$390,693

Spent - \$37,372 (Personnel, equipment)

Remaining - \$353,320

Task 7 – Design the commercial scale sequestration project and complete performance risk assessment

Task Manager – Zunsheng (John) Jiao

Task Update

- The contract with the Wyoming Geological Survey has just been approved.

Budget Update

Total Budget - \$1,500,000

Spent - \$0

Remaining - \$1,500,000

APPENDIX D

School of Energy Resources -Consolidated Budget

	FY 2011	FY 2012
ACADEMICS		
Salaries		
Associate Director of Academics	\$ 112,646	\$ 112,646
Office Associate	\$ 38,280	\$ 38,280
Fringe based on 37%	\$ 55,843	\$ 55,843
SER Faculty		
Salaries	\$ 1,612,756	\$ 1,612,756
Fringe based on 37%	\$ 596,720	\$ 596,720
New Faculty salary and Fringe	\$ -	\$ 205,500
New Faculty startup	\$ -	\$ 250,000
Start up	\$ 376,000	\$ 250,000
Recruiting	\$ 20,000	\$ -
Release Time	\$ -	\$ -
Total salary positions	\$ 2,812,244	\$ 3,121,744
Graduate Assistantships		
Graduate Assistantships	\$ 742,000	\$ 892,000
Fringe	\$ 9,300	\$ 12,300
Tuition & Fees	\$ 175,000	\$ 190,000
Total Stipends	\$ 926,300	\$ 1,094,300
Visiting Professorships		
Salaries	\$ 114,004	\$ 114,004
Fringe based on 37%	\$ 42,181	\$ 42,181
Travel and moving allowance	\$ 30,000	\$ 30,000
Total Visiting Professorships	\$ 186,185	\$ 186,185
Other Support and Pograms		
Office support expenses	\$ 25,000	\$ 25,000
Travel	\$ 25,000	\$ 25,000
Inter University Collaboration	\$ 50,000	\$ 50,000
Curriculum Development	\$ 40,000	\$ 40,000
Energy Summer Program for High School Students	\$ 80,000	\$ 80,000
Subtotal Academics	\$ 4,144,730	\$ 4,622,230
RESEARCH		
Salaries		
Associate Director of Research	\$ 60,000	\$ 120,000
COE Administrative Support	\$ 38,004	\$ 38,004
Carbon Management Director	\$ 210,000	\$ 210,000
Carbon Management Associate Director	\$ 58,356	\$ 58,356
Carbon Management Business Manager	\$ 45,024	\$ 45,024
Carbon Management Technical Coordinator	\$ 130,000	\$ 130,000
EORI Director	\$ 190,008	\$ 190,008
EORI Project Coordinator (1/2)	\$ 26,000	\$ 26,000
Fringe based on 37%	\$ 280,235	\$ 302,435
Total salary positions	\$ 1,037,627	\$ 1,119,827
Matching Grant Funds	\$ 700,000	\$ 555,000
Research Centers		
Carbon Management Research Center	\$ 931,569	\$ 931,569
Center for Energy Economics	\$ 316,131	\$ 316,131
Clean Coal Technology Center	\$ 56,400	\$ 56,400
Coal Bed Natural Gas Center	\$ 10,000	\$ 10,000
Enhanced Oil Recovery Institute	\$ 105,992	\$ 105,992
Research Center of Fundamentals of Subsurface Flow	\$ 500,000	\$ 500,000
Wind Energy Research Center	\$ 10,000	\$ 10,000
Wyoming Reclamation & Restoration Center	\$ -	\$ -
New Research Center Seed Money	\$ 75,000	\$ 75,000
Subtotal Research	\$ 3,742,719	\$ 3,679,919

School of Energy Resources -Consolidated Budget

	FY 2011	FY 2012
OUTREACH		
Salaries		
Associate Director of Energy Outreach	\$ 99,840	\$ 99,840
Program Coordinator	\$ 50,004	\$ 50,004
Energy Extension Coordinator	\$ 84,228	\$ 84,228
Fringe based on 37%	\$ 86,607	\$ 86,607
Total salary positions	\$ 320,679	\$ 320,679
Expenses		
Consulting Specialists	\$ 30,000	\$ 30,000
General Office support	\$ 10,000	\$ 10,000
Travel	\$ 35,000	\$ 40,000
Sponsorships	\$ 60,000	\$ 60,000
Publications and Advertising	\$ 60,000	\$ 70,000
Distinguished Speakers	\$ 20,000	\$ 20,000
Workshops - 3 yearly	\$ 160,000	\$ 160,000
Energy Information Center	\$ 50,000	\$ 50,000
Energy Academies	\$ 100,000	\$ 100,000
Subtotal Outreach	\$ 845,679	\$ 860,679
ADMINISTRATION		
Salaries		
Director	\$ 229,608	\$ 229,608
Staff Assistant	\$ 44,652	\$ 44,652
Business Manager	\$ 69,888	\$ 69,888
Accountant	\$ 41,400	\$ 41,400
Fringe based on 37%	\$ 142,653	\$ 142,653
Total salary positions	\$ 528,201	\$ 528,201
Expenses		
General Office support	\$ 100,000	\$ 100,000
Facilities Support	\$ -	\$ 250,000
Subtotal Administration	\$ 628,201	\$ 878,201
Total all divisions	\$ 9,361,328	\$ 10,041,028
Summary		
ACADEMICS	\$ 4,144,730	\$ 4,622,230
RESEARCH	\$ 3,742,719	\$ 3,679,919
OUTREACH	\$ 845,679	\$ 860,679
ADMINISTRATION	\$ 628,201	\$ 878,201
Total Budget Request	\$ 9,361,328	\$ 10,041,028
Total 2011/2012		\$ 19,402,357

Carbon Management Institute

Description	Total Years 1-3	Year 1	Year 2	Year 3
Full-time Salaries		-		
Director	420,000.00		210,000.00	210,000.00
Associate Director	129,024.00	12,312.00	58,356.00	58,356.00
Business Manager	97,552.00	7,504.00	45,024.00	45,024.00
Technical Coordinator	260,000.00		130,000.00	130,000.00
fringe 41% of FT salaries	371,696.16	8,124.56	181,785.80	181,785.80
Full time Salaries & Fringe	858,272.16	27,940.56	415,165.80	415,165.80
Part-time Salaries	-	-		
AWEC - TBA salary 2080@18.00 *2 (At-Will-Employee Contract)	149,760.00		74,880.00	74,880.00
fringe 9% (FICA7.65 +WC)	13,478.40		6,739.20	6,739.20
Grand Total FT & AWEC Salaries & fringe	163,238.40	-	81,619.20	81,619.20
Telephone Charges	1,700.00	700.00	500.00	500.00
Dues & Memberships	1,500.00		750.00	750.00
Registration & Conferences	1,600.00		800.00	800.00
Office Supplies	1,700.00	700.00	500.00	500.00
Data Processing/Tech & Supplies	400.00		200.00	200.00
Subscriptions & Databases	1,000.00		500.00	500.00
reference books & subscriptions	2,000.00		1,000.00	1,000.00
total support services	9,900.00	1,400.00	4,250.00	4,250.00
In state Travel	12,000.00	4,000.00	4,000.00	4,000.00
Common Carrier	-	-		
Vehicle Mileage Reimburse	-	-		
Per Diem Allowance	-	-		
Other Travel Expenses	-	-		
Actual Lodging Expenses	-	-		
Actual Meal & Gratuity Expense	-	-		
Out of State Travel	90,000.00	-	45,000.00	45,000.00
Common Carrier	-	-		
Vehicle Mileage Reimburse	-	-		
Per-Diem Allowance	-	-		
Other Travel Expenses	-	-		
Actual Lodging Expenses	-	-		
Actual Meal Gratuity Expense	-	-		
Non Empl Actual Meal Gratuity	4,500.00	1,500.00	1,500.00	1,500.00
Total Travel	106,500.00	5,500.00	50,500.00	50,500.00
Data Process Eq - Non-cap	-	-		
laptops (2@\$3000)	6,000.00	6,000.00	-	
Staff computers (4 @2000 ea & printers 4@ 1000)	12,000.00	12,000.00		
Soft ware	11,000.00	1,000.00	5,000.00	5,000.00
Total Data Services	29,000.00	19,000.00	5,000.00	5,000.00
Publications (Business cards brochures 6 per yr)	9,000.00	3,000.00	3,000.00	3,000.00
Website	900.00	500.00	200.00	200.00
Food Service (catering for FR & conf)	6,000.00	2,000.00	2,000.00	2,000.00
Other Professional Services	-	-		
Total Professional Services	15,900.00	5,500.00	5,200.00	5,200.00
SUB-CONTRACT SERVICES				
Outreach Coordinator	346,000.00	26,000.00	160,000.00	160,000.00
Field Manager	240,000.00		120,000.00	120,000.00
WSGS sub contract	1,000,000.00		500,000.00	500,000.00
Total sub-contracts	1,586,000.00	26,000.00	780,000.00	780,000.00
TOTAL COSTS	2,768,810.56	85,340.56	1,341,735.00	1,341,735.00

School of Energy Resources - AML and Rollover Spending Authority

	A	B	C	D	E	F	G
			FY10 Year to date expenditures	TOTAL FY09 & FY10 YTD Expenditures	FY09/FY10 Budgeted Dollars	Remaining Budgeted Dollars	Unallocated Funds
1		FY09					
2	AML FUNDS						
3	ACADEMICS	\$2,609,641	\$ 6,417,422	\$ 9,027,063	\$10,618,561	\$ 1,591,498	\$ 946,611
4	RESEARCH	\$ 244,580	\$ 2,810,367	\$ 3,054,947	\$ 3,081,239	\$ 26,292	\$ 20,669
5	OUTREACH	\$ 199,913	\$ 1,412,707	\$ 1,612,620	\$ 2,397,046	\$ 787,426	\$ 674,597
6	ADMINISTRATION	\$ 460,496	\$ 504,008	\$ 964,504	\$ 1,323,719	\$ 359,215	\$ 358,031
7	TOTAL AML	\$3,514,630	\$ 11,144,504	\$ 14,659,134	\$17,420,565	\$ 2,761,431	\$ 1,999,908
8	Total AML Spending Authority					\$ 2,761,431	
9	FY 2011/2012 anticipated rollover						\$ 1,999,908
10	ROLLOVER FUNDS						
11	ACADEMICS	\$ 898,105	\$ 650,779.00	\$ 1,548,884			
12	RESEARCH	\$ 82,450	\$ 334,174.74	\$ 416,625			
13	OUTREACH	\$ 17,592	\$ 8,371	\$ 25,963			
14	ADMINISTRATION	\$ 29,677		\$ 29,677			
15	ROLLOVER FUNDS			\$ -	\$ 2,021,149		
16	Total	\$1,027,824	\$ 993,325	\$ 2,021,149	\$ 2,021,149	\$ -	\$ -
17	Total AML and Rollover Funds	\$4,542,454	\$ 12,137,829	\$ 16,680,283	\$19,441,714	\$ 2,761,431	\$ 1,999,908

Uranium

Account Detail

Initial Funding	\$ 1,600,000.00
Balance Remaining	\$ 1,564,547.79
Expenditures by Category	Sum
consulting	\$ 19,610.18
Meridian	\$ 19,610.18
office support	\$ 326.58
FedEx Kinko's	\$ 95.40
Radio Shack	\$ 123.45
Staples	\$ 107.73
teleconference	\$ 229.84
AT Conference	\$ 229.84
travel	\$ 6,406.93
Byrnes, Mary	\$ 85.39
Little America	\$ 5,690.15
Thompson & Thompson	\$ 631.39
conference Meeting Expense	\$ 8,878.68
Jimmy Johns	\$ 87.00
Little America	\$ 8,791.68
Grand Total	\$ 35,452.21

Western States Energy Environmental Symposium

Account Detail

Initial Funding	\$ 350,000.00
Balance Remaining	\$ 40,579.27
Expenditures by Category	Sum
payroll	\$ 921.50
Kinney, Ben	\$ 567.68
Frint, Jessica	\$ 353.82
advertising	\$ 1,130.00
High Country News	\$ 990.00
T2 Communications - design	\$ 140.00
transportation	\$ 10,150.00
WYDOT - Air Plane	\$ 6,125.00
Alltrans - Teton Village	\$ 4,025.00
support	\$ 20,376.86
Hughes Production	\$ 10,921.50
FedEx - Printing	\$ 5,109.04
AT Conference - Conference Call Expenditure	\$ 1,508.02
Canvas Unlimited - Tent	\$ 891.25
Tram Bar - Food	\$ 862.50
Shosone Distributing - Supplies	\$ 788.00
Vans Wholesale - Food	\$ 149.46
Flat Creek saddle - Supplies	\$ 60.00
Lubnan Law offices - Postage	\$ 39.36
Staples - Supplies	\$ 35.48
Shipping & Rec	\$ 12.25
travel - Out of State Legislators	\$ 43,413.60
lodging & food	\$ 105,395.60
Hotel Terra	\$ 83,798.53
Snake River Lodge	\$ 11,779.20
Teton Mountain Lodge	\$ 5,400.00
Jackson Hole Resort Lodging	\$ 3,417.87
Walk Festival contract	\$ 1,000.00
consulting	\$ 128,033.17
Hip Consulting Group	\$ 75,018.88
Meridan Institute	\$ 40,971.88
Brimmer Communications	\$ 7,070.41
Joe Malarkey Productions	\$ 4,972.00
Grand Total	\$ 309,420.73

School of Energy Resources Summer Graduate Assistantships

College/Department	Proposal	Principal Investigator	Name of GA	Degree
CAG Renewable Resources	Understanding disruption & recovery of ecological structure & functioning for restoration of disturbed W.	Norton	Mason, Amber	PhD
CAS Chemistry	Quantum Dot Sensitization: Strategies for Increases in Photovoltaic Solar Cell Efficiencies	Parkinson	Choi, Daejin	PhD
CAS Chemistry	New catalyst strategies for selective coal modification & liquefaction	Roddick	Gruver, Brian	PhD
CAS Chemistry	Influence of supramolecular organization on energy transfer properties of chromophore-DNA arrays	Balaz	Sargsyan, Gevorg	PhD
CAS Computer Science	Addressing the computational challenges of time-lapse, full-wave seismic imaging using hybrid cluster	Wang	Guo, Ping	PhD
CAS Geology & Geophysics	Monitoring of hydrocarbon & carbon-sequestered formations using time-lapse seismic & electromagnetic	Mallik	Amit Padhi	PhD
CAS Geology & Geophysics	Co-sequestration of CO ₂ -SO ₂ Mixtures Emitted from coal-fired power plants	Kaszuba	Chopping, Curtis	MA
CAS Geology & Geophysics	Monitoring of Hydrocarbon & Carbon sequestered Formations Using Time-lapse Seismic & Electromag	Dueker	Hansen, Steve	PhD
CAS Geology & Geophysics	Addressing the computational challenges of time-lapse, full-wave seismic imaging using hybrid cluster	Chen	Mu, Dawei	PhD
CAS Mathematics	A new concept for the gasification of Wyoming coal-extension	Heinz	Stoellinger, M	PhD
COEA Atmospheric Science	Contrast Data - Ozone, methane and non methane hydrocarbons	Field	Sturtevant, Thomas	MA
COEA Chemical Engineering	CO ₂ sequestration in deep saline aquifers	Piri	Aghaei, Arash	PhD
COEA Chemical Engineering	Carbon dioxide capture via enzyme nanoparticle biocatalysis	Johnson	Lee, Seob Joo	PhD
COEA Chemical Engineering	Enzyme Nanoparticle Synthesis & Characterization for Biofuel Cells & Cellulose Hydrolysis	Johnson	Park, Hee	PhD
COEA Chemical Engineering	Characterization & bio-remediation of dissolved organic matter in Wyoming oilfield waters	Goual/Colberg	Saraji, Sohei	PhD
COEA Chemical Engineering	Wyoming Coal Gasification Economics, Kinetics & Process Technology	Bell	Schaffers, William	PhD
COEA Chemical Engineering	Water chemistry modification for improved-oil recovery: chemical, interfacial & rheological mechanisms	Alvarado	Bidhendi, Mehrnoosh	PhD
COEA Civil & Architectural Engineering	Microbial Bioengineering for Renewable Energy	Bagley	Lou, Yitong	MA
Educ College of Education	ERS capstone course development - Energy Academies	Slater	Yourkowski, Eden	MA

Total # of GAs

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APPENDIX E

Energy Resource Center

Report Date 05/25/2010

Date of Commitment	DONOR	Commitment Amount Approved for Match	Total Paid by Donor as of 7/10	Net Unpaid by Donor	Amt Due from Donor FY10	Amt Due from Donor FY11	Amt Due from Donor FY12	Amt Due from Donor FY13	Amt Due from Donor FY14
2/2/2009	Arch Coal Inc.	\$750,000.00	\$500,000.00	\$250,000.00	\$0.00	\$250,000.00	\$0.00	\$0.00	\$0.00
9/10/2007	BP Foundation, Inc.	\$2,000,000.00	\$2,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2/21/2008	ConocoPhillips	\$170,000.00	\$102,000.00	\$68,000.00	\$0.00	\$34,000.00	\$34,000.00	\$0.00	\$0.00
1/30/2007	Encana Oil & Gas USA, Inc.	\$5,000,000.00	\$4,000,000.00	\$1,000,000.00	\$0.00	\$1,000,000.00	\$0.00	\$0.00	\$0.00
2/21/2008	Marathon Oil Company Foundation	\$250,000.00	\$250,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12/31/2007	Questar Corporation	\$30,000.00	\$30,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12/22/2008	Questar Corporation	\$50,000.00	\$50,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1/5/2010	Questar Corporation	\$100,000.00	\$100,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12/29/2006	Shell Exploration & Production Co.	\$2,000,000.00	\$2,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2/25/2010	Peabody	\$2,000,000.00	\$0.00	\$2,000,000.00	\$0.00	\$500,000.00	\$500,000.00	\$500,000.00	\$500,000.00
All Commitments and State Match					\$3,318,000.00	\$1,784,000.00	\$534,000.00	\$500,000.00	\$500,000.00
Total Commitments to Date					\$12,350,000.00				
Total Approved State Match to Date					\$24,700,000.00				

All on Hand

Total Gifts Paid to Date \$9,032,000.00

Interest Earned at UW Foundation (4/30/10) \$406,142.94

Current Balance at UW (Match + Interest - Expenses) \$18,808,537.55

All Anticipated Pledges/State Match

Total Donor Pledges \$3,318,000.00

Total Approved State Match \$6,636,000.00

All Gifts, Pledges and Interest \$25,444,537.55

Amt Due FY10	Amt Due FY11	Amt Due FY12	Amt Due FY13	Amt Due FY14
\$0.00	\$1,784,000.00	\$534,000.00	\$500,000.00	\$500,000.00
\$0.00	\$1,784,000.00	\$534,000.00	\$500,000.00	\$500,000.00
\$18,808,537.55	\$22,376,537.55	\$23,444,537.55	\$24,444,537.55	\$25,444,537.55



News Release

Peabody Energy Grants \$2 Million to Develop Clean Energy Technology Lab at the University of Wyoming



May 19, 2010 -- The University of Wyoming (UW) today announced a \$2 million gift from Peabody Energy to create the Peabody Energy Clean Coal Technology Laboratory in the UW Energy Resources Center in Laramie.

This gift will be doubled by the Wyoming State Legislature matching fund.

Wyoming is investing significant resources in clean coal research and has committed nearly \$75 million, which has resulted in partnerships with industry leaders - such as Peabody - who prioritize developing and commercializing clean coal technologies, said UW President Tom Buchanan.

"Research in the area of clean coal technology is one of the particular emphases for our School of Energy Resources, and this gift provides laboratory space for the expanding work that UW faculty and students are doing in this field," said Buchanan. "This serves as an excellent example of how university research and industry application can work together with support from state government to make Wyoming a leader in clean coal technology."

As part of the School of Energy Resources, the Peabody Energy Clean Coal Technology Laboratory will house research facilities to develop coal-fueled energy technologies, with an emphasis on the next generation of low-carbon and near-zero emissions. These include carbon dioxide capture and storage (CCS) and laboratory-scale coal gasification, which involve hydromethanation (a process that enables the highly efficient conversion of coal into clean, pipeline quality methane) research, synthesis gas conversion, catalyst development and materials research.

"Peabody is a global leader in clean coal solutions, advancing more than a dozen projects and partnerships to commercialize near-zero emissions technologies," said Peabody Energy Chairman and Chief Executive Officer Gregory H. Boyce. "We applaud the University of Wyoming and the state for

leadership in this research."

Carbon capture and storage compresses carbon dioxide into a fluid-like state and injects it underground to further recover oil or for deep storage into saline aquifers or other geology. Coal gasification can convert coal to natural gas, transportation fuels and chemicals.

The gift brings together UW and industry experts to capitalize on Wyoming's significant investment in developing clean energy market technologies, said UW Foundation President Ben Blalock.

"Peabody's partnership with UW's energy programs is another major corporate tie for Wyoming's university," said Blalock. "The Clean Coal Technology Laboratory will serve as an asset to our university, our state and the energy industry."

As an example of increasing global interest in managing carbon, the Obama administration is encouraging broad deployment of CCS technologies. This includes as many as 10 commercial-scale CCS demonstrations that could come online as quickly as 2016.

Peabody is the top producer in Wyoming's Powder River Basin and a global leader in clean coal solutions, advancing signature projects around the world to commercialize near-zero emission technologies, including GreenGen in China, the COAL21 Fund and Global Carbon Capture and Storage Initiative in Australia, and FutureGen in the United States.

Peabody Energy (NYSE: BTU) is the world's largest private-sector coal company and a global leader in clean coal solutions. With 2009 sales of 244 million tons and \$6 billion in revenues, Peabody fuels 10 percent of U.S. power and 2 percent of worldwide electricity, lighting cities on six continents. Peabody is energizing the world, one Btu at a time.

Posted on Wednesday, May 19, 2010