Minutes of the UW Energy Resource Council May 23, 2008

Members present:

Representative Tom Lockhart (Council Vice Chairman)
Keith Rattie – Chairman, President & CEO, Questar Corporation
Bobby Shackouls – Chairman, Burlington Resources Inc. (retired)
Paul Lang – President Western Operations, Arch Coal Inc.
Rob Wallace – Manager, Government Relations, G.E. Energy

Members absent:

Ron Harper – CEO & General Manager, Basin Electric Power Coop, (Council Chairman) Senator Charles Townsend Tom Stroock - CEO, Alpha Development Corp; former US Ambassador Tom Buchanan - Ex officio, UW President Harold Bergman - Ex officio, Director, RIENR

Meeting Attendees:

Mark Northam
Rob Hurless
K J Reddy
Christopher Spooner
Ben Blalock
Pam Henderson
Sarah Schulmeyer
Bill Gern

Welcome and Approval of the Agenda and Minutes

Vice Chairman Tom Lockhart called the meeting to order at 9:05 am. Paul Lang motioned and Bobby Shackouls seconded the March 14, 2008 minutes, the March 14 executive session minutes, and the May 23 agenda be accepted. The motion was passed unanimously. (Minutes Appendix A) (Agenda – Appendix B)

Update on Fundraising

Ben Blalock gave an update on fundraising highlighting funds for the Center. A major push was made in Houston recently with ConocoPhillips, Ultra, and Anadarko. (Fundraising – Appendix C)

Update on Faculty/Staff Hires

Northam gave an update on the faculty hires. Seven positions are confirmed as filled. Northam hopes all ERC can meet new hires at our September 5 meeting. Northam explained three focus areas with hiring faculty. They are:

- A contribution in maximizing recovery of known energy resources.
- A contribution in clean coal technologies.
- A contribution in alternative and renewable energy.

Northam gave an update on the search for a Business Manager, which has resulted in the hiring of David Mornes. (Appendix D).

Update on Matching Grant Funds

Northam gave an update on matching grant funds. (MGF - Appendix E)

Update on Financial Report

Northam gave an update of monies left unspent. \$2 million will be rolled over into the FY09-10 budget. Northam will send an update to the ERC by May 31.

GE Update

Bill Gern gave an update on the GE project. Bob Ballard has been hired as the Project Manager, who brings a tremendous background to the job.

Other Business

Northam had three areas to address:

- Queensland CO2 conference: Northam stated there were two collaborative areas between University of Queensland and UW: collaboration between the University Queensland and UW on the upcoming clean coal offering, and between Clean Coal Research Centers at both organizations.
- A desire among Community Colleges to have an affiliation with SER: Western Wyoming College, Casper Community College, and Gillette College would like to have an affiliation with SER. ConocoPhillips may contribute the funds to make it work.
- Northam is responding to continued interest in SER by speaking at: the WMA annual conference, the Wyoming Infrastructure Authority's Board meeting, NextGen Energy Council Board meeting, and the Western Business Roundtable. Northam and Reddy also recently met with the Nature Conservancy. They would like to have WCC working with them each summer and form a more formal working relationship with the Wyoming Reclamation Research Center.

Bill Gern wanted to update the ERC about UW Professor Mohammad Piri's work with NCAR's new technology, "Blue Fire" as a complement to the EnCana lab. Dr. Piri will now be able to model oil movement on NCAR's existing supercomputer.

Future Meetings

The next ERC meeting will be on Friday, September 5, 2008 in Laramie including:

- A September 4 bar-b-q for SER faculty and ERC to meet.
- A September 5 ERC & CCTF meeting
- A September 6 Football Game in the Presidents Box for a game between UW and Air Force.
 Please RSVP

Randall Luthi be in Laramie at the same time for any ERC interactions.

Action Items

Northam will submit to the ERC:

- An update on year end financials.
- An updated mission strategy for faculty hiring and research centers.

• A position paper on "Why the Coal Industry Would Benefit from Working with University of Wyoming's, School of Energy Resources."

A motion was made by Chairman Lockhart and seconded by Keith Rattie to adjourn the ERC meeting at approximately 10:15 a.m.

Respectfully Submitted

Representative Lockhart, Vice Chairman

Appendix A

Drafted Minutes of the UW Energy Resource Council March 14, 2008

Members present:

Ron Harper – CEO & General Manager, Basin Electric Power Coop, (Council Chairman) Representative Tom Lockhart (Council Vice Chairman)

Keith Rattie – Chairman, President & CEO, Questar Corporation

Bobby Shackouls – Chairman, Burlington Resources Inc. (retired) (by phone)

Tom Stroock – CEO, Alpha Development Corp; former US Ambassador

Paul Lang – President Western Operations, Arch Coal Inc.

Members absent:

Tom Buchanan - Ex officio, UW President Rob Wallace – Manager, Government Relations, G.E. Energy Senator Charles Townsend Harold Bergman - Ex officio, Director, RIENR

Welcome and Approval of the Agenda and Minutes

Chairman Ron Harper called the meeting to order at 9:00 am. Tom Lockhart motioned and Keith Rattie seconded the November 16, 2007 minutes be accepted. The motion was passed unanimously. (Minutes Appendix A)

Lockhart motioned to accept the agenda, and Keith Rattie seconded it. The motion was passed passed. (Agenda – Appendix B)

Election of Officers

Tom Stroock made the motion to re-elect Ron Harper as Chairman, and Tom Lockhart as Vice Chairman. Keith Rattie seconded it. The motion was passed unanimously.

Update on Fundraising

Ben Blalock gave an update on fundraising highlighting the gifts from Marathon Oil, ConocoPhillips, Questar, Schlumberger, and Halliburton. Rattie asked if the software gift from Schulmberger and Halliburton, could be matched by state funds. Blalock stated there was nothing in the legislation to support matching software gifts. (Fundraising – Appendix C)

Blalock also issued an invitation to the council to the Foundations April 22 Presidents Dinner, and SER will follow up with an invitation going out to them.

Update on Faculty/Staff Hires

KJ Reddy gave an update on the four faculty hires, which included Felipe Pereira in Math, Bruce Parkinson in Chemistry, Subhashsis Mallick and Po Chen in Geology and Geophysics. Lockhart asked what the key reason was for Parkinson accepting the chemistry position. Northam stated that Parkinson saw the Wyoming legislature moving in the right direction by funding SER, and wanted to be a part of it. (Biography's – Appendix D)

Northam gave an update on the beginning search for a Business Manager.

Update on Matching Grant Funds

Northam gave an update on matching grant funds. (MGF - Appendix E)

Update on Financial Report

Northam gave an update of expenditures through February, along with a brief budget for the spending of the balance through the FY08 period. (Financial Report - Appendix F)

Update on Legislative Session

Rick Miller commended Tom Lockhart and Chuck Townsend on their hard work during this session. Miller gave an update on the outcome of the legislative session which included the below items:

- The FY 09-10 biennium budget for SER totals \$ 19,440,742. This is a total from FY 08 carry over, and Abandoned Mine Land Fund to be spent on the advancement of energy resources.
- SER will develop a plan and timeline for establishing a uranium research center.
- \$3,800,000 has been given for clean coal technology research. The funds for the clean coal projects that were recommended to the legislature by the clean coal technology task force in FY08 will be expended when the full matching amount is received by the university.
- The continuation of the clean coal technology task force was extended to June 30, 2010.

Tom Stroock commented on the importance of finding a business manager that understands the operation of funding between UW and the legislature.

2009-2010 Budget Plans

Northam gave an update on the FY09-10 budget. (2009-2010 Budget Plans – Appendix G)

WRI Introduction of Director

Bill Gern introduced Don Collins, the new Director of Western Research Institute. Director Collins gave a brief overview of WRI activities.

Call to Executive Session

A motion was made by Paul Lang and seconded by Tom Lockhart to go into executive session to discuss proprietary information about the GE coal gasification facility. The motion was passed. The ERC went into executive session at approximately 11:15 a.m. and returned from executive session at approximately 11:45 a.m.

Working Lunch with Academic Deans

Four Academic Deans gave updates on their faculty searches for SER. They included:

- Dean Rob Ettema Engineering
- Dean Frank Galey Agriculture
- Dean Jerry Parkinson Law

Update on Academic Activities

KJ Reddy gave an update on position searches. (Position Searches – Appendix H) Reddy also gave an update on the SER (Earth System Sciences) Academic Degree programs. (Academic Programs – Appendix I)

Update on Energy Related Curriculum Plans

Andy Hansen gave an update on energy related curriculum plans. (Energy Related Curriculum Plans – Appendix J)

Clean Coal Workshop in Queensland

The ERC is invited to participate in a clean coal workshop in Queensland on April 10-11, 2008.

Future Meetings

The next ERC meeting will be on May 23, 2008. Chairman Harper will not be at this meeting. Vice Chairman Lockhart will be leading this meeting. Northam suggested an in person meeting for August 22, 2008 instead of a teleconference call. He suggested a get together of SER faculty and the ERC. A decision was not made at this time.

Tom Lockhart made a motion to adjourn the meeting, and Tom Stroock seconded it. The motion was passed resulting in an adjournment at approximately 2:00.

Respectfully Submitted

Ron Harper, Chairman

Appendix B

Agenda May 23, 2008 Energy Resource Council Meeting

- 1) Review of minutes from 3/14/08 and 5/23/08 agenda. Acceptance of the executive session minutes.
- 2) Update on fundraising
- 3) Update on faculty and staff hires
- 4) Update on matching grant funds
- 5) Financial Report
- 6) GE update if MOU is signed
- 7) Other business
- 8) Upcoming meetings- Laramie

UW School of Energy Resources Center

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Notes	5,000,000 Create the SER Center.	2,000,000 Create the SER Center.	2,000,000 Create the SER Center.	250,000 Create the Marathon Interdisciplinary Fossil Fuel Research Lab in the SER Center.	170,000 Create the ConocoPhillips Reservoir Characterization Collaboratory in the SER Center	30,000 Create the SER Center.		
Wyoming Facility Match Reserved/ Received	5,000,000	2,000,000	2,000,000	250,000	170,000	30,000		9,450,000
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Donor Funds Pedged/Given	5,000,000	2,000,000	2,000,000	250,000	170,000	30,000		9,450,000
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Total Funds	\$ 10,000,000	\$ 4,000,000	\$ 4,000,000	\$ 500,000	\$ 340,000	000'09		\$ 18,900,000 \$
								Total \$
Donor	EnCana	Shell	BP America	Marathon	ConocoPhillips	Questar		Ţ

UW School of Energy Resources Endowments

	5,299,131 Income from the state match is available to SER Director for general support.	80,000 Create support of the Marathon Interdisciplinary Fossil Fuel Research Lab.	
Wyoming Match Reserved/ Received	5,299,131	80,000	
Donor Funds Pledged/Given	5,299,131	\$ 000,08	
otal Funds	10,598,261 \$	160,000 \$	
F	s	↔	
Donor	Jim Nielson	Marathon	

UW School of Energy Resources Research and Teaching Centers

Total \$ 10,758,261 \$

5,379,131

	Three-year license/maintenance agreement of ECLIPSE software for EORI.	Three-year license/maintenance agreement of Landmark software for EORI.
Total In-kind	\$ 26,318,500	\$ 5,502,059
Donor	Schlumberger	Halliburton

Endowment Gifts for Petroleum Engineering

Total \$ 31,820,559

Wyoming Match Reserved/ Received	\$ 335,000 Create the Marathon Student Experience Excellence Fund.	€	
Donor Funds Pledged/Given	335,000	90,000	\$ 75,000
Total Funds	\$ 670,000	\$ 180,000 \$	\$ 75,000
Donor	Marathon	ConocoPhillips	ConocoPhillips

500,000

925,000

Total \$

Facility Gifts for Petroleum Engineering	for	Petroleum	핍	gineering			
Donor		Total Funds	— <u>L</u>	Donor Funds Pledged/Given	Š	Wyoming Match Reserved/ Received	
EnCana BP America	မှာ မှာ (4,000,000	မ မ	2,000,000	မှာ မှာ	2,000,000	2,000,000 Create new petroleum engineering reservoir simulation lab in the College of Engineering. 2,000,000 Create new Wind Research Center; matching funds have not been determined.
BP America	e s	2,000,000	69	1,000,000	မာ	1,000,000	1,000,000 Create new petroleum engineering rock and fluids lab in the College of Engineering.
Tota	Total \$	10,000,000 \$	ω	\$ 000,000,	()	5,000,000	
Endowment Gifts for Geology & Geophysics	Gifts	s for Geolo	gy	& Geophys	sics		
Donor		Total Funds	- a	Donor Funds Pledged/Given	8	Wyoming Match Reserved/ Received	
Marathon	↔	670,000	S	335,000	s	335,000	335,000 Create the Marathon Geophysical Field Excellence Fund.
ConocoPhillips	ഗ	40,000	S	40,000			Continue support of the Fall Semester Rocky Mountain Field Trip.
ConocoPhillips	()	125,000	B	125,000			Provide new support of graduate student field studies.
EnCana	69	000'06	မှ	000'06			Support of students in the Geology and Geophysics Department.
Tota	Total \$	925,000 \$	s	\$ 000,065	ω	335,000	
	•						

Total Funds Raised	Rai	sed			
		Total Funds		Donor Funds Pledged/Given	Wyoming Match Reserved/ Received
Miscellaneous	s	101,750	S	51,750	\$ 50,000
TOTAL	G	73,430,570 \$	S	52,791,440	\$ 20,639,131

Received 50,000 20,639,131

Appendix D

ERC Update Status of SER Faculty Position Searches FY 2007-2008 (As of May 22, 2008)

Mathematics - Numerical modeling of reservoir fluid flows

- Dr. Felipe Pereria has been hired in the Mathematics Department.
- Full Professor with Tenure.
- He began his position on 1/1/2008.

Mathematics - Reservoir modeling and porous-media flow analysis

- Dr. Craig Douglas (University of Kentucky and Yale University) has accepted a position in the Mathematics Department.
- Full Professor with Tenure.
- He starts at UW on 8/19/2008.

Chemistry - Energy storage, chemical conversion or renewable energy resources

- Dr. Bruce Parkinson (Colorado State University) has accepted a position in the Chemistry Department.
- Full Professor with Tenure
- He starts at UW on 8/19/2008.

Geophysics- Computational Seismology

- Dr. Subhashis Mallick (Chevron Research) has accepted a position in the Geology and Geophysics Department.
- Full Professor with Tenure.
- He starts at UW on 8/19/2008.

Geophysics- Computational/Theoretical Seismology

- Dr. Po Chen (Lamont-Doherty Earth Observatory) has accepted a position in the Geology and Geophysics Department.
- Assistant Professor, Tenure Track.
- He started at UW in May 2008.

Chemical Engineering - Coal-Conversion Technologies

- Dr. Maohong Fan (Georgia Institute of Technology) has accepted a position in the Chemical and Petroleum Engineering Department.
- · Associate Professor, Tenure Track, 3 years to Tenure
- He starts at UW on 8/19/2008.

Geochemistry - HT/HP Multiphase Fluid-Rock Reactions

- Dr. John Kaszuba (Los Alamos National Laboratory)
- · Associate Professor, 4 years to Tenure,
- He starts at UW on 8/19/2008

Renewable Resources - Energy-Related Land Reclamation/Restoration Ecologist

- 4 candidates have been interviewed.
- Offer to first candidate has been declined (home university countered)
- Offer to second candidate in preparation

Mechanical Engineering – Wind energy

- Offer made to Dr. Jayanarayanan Sitaraman (National Institute of Aerospace, Langley Research Center)
- Assistant Professor, Tenure Track
- Spousal hire issue being reviewed
- Offer being prepared for second candidate

Economics & Finance - Global Energy Markets and Energy Economics

- One qualified candidate has been interviewed
- Offer tendered to Dr. Timothy Considine (Penn State University)
- Full Professor with Tenure

Petroleum Engineering - Petroleum Engineering

- 4 candidates interviewed. None appropriate for SER faculty position.
- One highly qualified candidate has since applied; will be interviewed June 2

Summary:

- Seven positions have been filled
- Three offers tender in the month of May
- One positions still interviewing
- SER will likely have 9 to 11 faculty on campus starting with the Fall 2008 semester
- Approximately \$1.5 M in salary and benefits commitment (7 positions and \$1.5 M budgeted for FY 2009)
- Approximately \$2.25 M in start-up commitments in FY 2009 and 2010, \$250K over the full amount budgeted

School of Energy Resources Matching Grant Fund May 2008

FY 2008

Chamberlain, Kevin D	Moss, Justin V	Tang, Jinke E	Montague, Derek V	Kauffman, Matthew V	Sullivan, B. Patrick [Denzer, Anthony	Garrison, Jean J	Lee, Long	Patrick	Eggleston, Carrick F	Sullivan, B. Patrick	Goual, Lamia F	Zhang, Ye	ā		Argyle, Morris	Alvarado, Vladimir 🗡	Carrapa, Barbara		Zhou, Jing /	PI	
Department of Energy & Cameco Inc.	Whitney Benefits	Department of Energy	wyoming Wyoming DEQ, Bureau of Land Management, U.S. Forest Service, & EPA	Wyoming Wildlife & Natural Resource Trust, Wyoming Game & Fish, Wildlife Heritage Foundation of	Department of Energy	U.S. Green Building Council	Japan Foundation Grant & Institute for Global Environmental Strategies	National Science Foundation	Fossil Fuel Program NETL DOE	Petroleum Research Fund	NSF SGER Program	REPSOL	DOE Basic Energy Science		OCT TERSON	Jupiter Oxygen**	American Chemical Society	American Chemical Society		American Chemical Society	External Organization	Agreed to Provide Matching F
Long-term study to assess the utility of Pb isotope analyses for improved monitoring of aquifer interactions in the in-situ U industry	Sustainability of Straight Vegetable Oil & Biodiesel Fuel Production for Wyoming: Development, Production, Use & Education	Investigating energy transfer in novel Ce3+ & Cr3+ co-doped phosphors & their applications in white light	Upper Green River Basin Ozone Monitoring Study	Identifying mule deer migration routes to and from the Pinedale Anticline Project Area	Highly Oxidizing Ligand-to-Metal Charge Transfer Excited States for Solar Energy Conversion	Real-Time Cross-Disciplinary Distance Collaboration for Green Building Design	Energy Security & Climate Security in Asia: Implications for U.S. Enreign Policy	Transport Mechanisms for Multi-phase Micro-fluids on Structured Solid Surfaces	Energy from Organic Waste Degradation Using Biological Fuel Cells	Optimization of Inexpensive Semiconductors for Solar Carbon Fixation	Linear Delocalized Metal-to-Ligand Charge Transfer Excited States Based on Carborod Acceptors	Kinetics of Heavy Organic Deposition & Precipitation Onsets in Crude Oil Flow Systems	Evaluation of Model uncertainity in CO2 Sequestration in Deep Aquifers	Hysteresis & its Implications for Gas Recovery	Combustion of Coal	Mercury Removal from Flue Gas Derived from Oxygen	Dynamics of solid-stabilized emulsions in porous media	Dynamics of deformation & basin development during	reactivity of ceria-based metal catalysts toward water- gas shift reaction	Atomic-scale understanding & tuning of chemical	Proposal	Agreed to Provide Matching Funds-Waiting for Approval from External Organization
\$60,000	\$22,850	\$90,000	\$97,952	\$56,720	\$50,000	\$18,434	\$38,231	\$48,183	\$100,000	\$50,000	\$43,000	\$72,000	\$82,450	\$100,000		\$25,000	\$50,000	\$50,000		\$50,000	MGF Funds	
\$60,000	\$48,750	\$600,000	\$97,952	\$77,000	\$383,000	\$19,908	\$300,000	\$172,465	\$150,000	\$100,000	\$120,700	\$184,000	\$82,450			\$25,000	\$50,000	\$50,000		\$50,000	Funds	External
\$120,000	\$71,600	\$690,000	\$195,904	\$133,720	\$433,000	\$38,342	\$338,231	\$220,648	\$250,000	\$150,000	\$163,700	\$256,000	\$164,900	\$1,294,000		\$50,000	\$100,000	\$100,000		\$100,000	Funds	Total

School of Energy Resources Matching Grant Fund May 2008

		\$41,236 \$349,153 5	Analysis & Computation of Spectral Stability in Combustion, Gas Dynamics, & Porous Media FY08 Denied Proposals	National Science Foundation	Lyng, Gregory
		\$57,917	Environmental Heterogeneity in Reclaied Soils to Enhance Diversity of Reestablished Plant Communities	Office of Surface Mining	Stahl, Peter
		\$100,000	Recovery of Heavy Oil Using Supercritical Water: Experimentation & Modeling	Research Partnership to Secure Energy for America	Piri, Mohammad
		\$100,000 \$50,000	Aerodynamics & Control of Wind Turbines Characterization of Sodium Silicate Derived Polymer Electrolyte Membrance Structures for Microchip based Portable Fuel Cells	National Science Foundation American Chemical Society	Naughton, Jonathan Debashis, Dutta
		MGF Funds	Funding from External Organization Denied Proposal	Funding External Organization	. <u>P</u>
		2	#Paid Proposals FY 2008		
\$10,000 \$531.500	\$5,000 \$466.500	\$5,000 \$65,000	Pilot Study to Assess the Utility of Pb Isotope Analyses for Improved Monitoring of Aquifer Interactions in the Instru U Mining Industry FV08 Paid	Cameco, Inc.	Chamberlain, Kevin
\$521,500	\$461,500	\$60,000	Identifying Disturbance Mechanisms Influencing Habitat Selection by Elk in Natural Gas Development Fields	Wyoming Wildlife & Natural Resource Trust and USDI Bureau of Land Management	Beck, Jeffrey
Total Funds	External Funds	MGF Funds	FY 2008 Funding from External Organization Received & MGF Funds Paid Organization	Funding from Extern External Organization	P
		24	קר - הריים מוט מוט	proval	**Received verbal approval
\$6,103,060	\$4,701,201	\$1,401,859	Methane Heid FY08 Subtotal # Promosals		
\$190,000	\$150,000	\$40,000	Identifying Habitats for Greater sage-Grouse Population Persistence within the Atlantic Rim, Wyoming Coalbed	Anadarko Petroleum Corporation	Beck, Jeffrey
\$76,628	\$32,076	\$44,552	Reclamation Costs, Bonding Systems, & the Probability of Reclamation in Wyoming's Oil & Gas Industry	Wyoming Wildlife & Natural Wyoming Wildlife & Natural Resource Trust, Anadarko Petroleum Corp, Questar Exploration & Production Co	Andersen, Matt
\$600,000	\$500,000	\$100,000	Immobilized enzyme systems for conversion of woody biomass for butanol production	Department of Energy Biomass Program	Johnson, Patrick
\$218,587	\$180,000	\$38,587	Environment-Dependent Instability of Organic-Based Framework Materials	Department of Energy Office of Basic Energy Science	Jun, Sukky
\$147,800	\$73,900	\$73,900	Effects of Natural Gas Well Development & Reclamation Activities on Topsoil Properties	Anadarko, BP, Encana, Questar, Western Sustainable Agriculture Research & Education Program, UW AES Competitive Grants Program, USDA-NRI Soil Processes Program	Norton, Jay

School of Energy Resources

May 2008	Matching Grant Fund
8	Fund

		Argyle, Morris	Mavriplis, Dimitri	Bell, David	Argyle, Morris	Tang, Jinke	Johnson, Patrick	Piri, Mohammad	Campbell-Stone, Erin Heller, Paul	Р			Naughton, Jonathan Bagley, David	PI
		Idaho National Laboratory	Department of Energy	Idaho National Laboratory	Western Research Institute	Sharp Laboratories of America	North Central Sun Grant Center	Total E&P UK PLC	Wyoming NASA Space Grant American Chemical Society	Funding from External Organization			Department of Energy Department of Energy	Funding from Organization
# Proposals	FY07 Subtotal	Nonthermal Plasma Reactors for the Decomposition of Hydrogen Sulfide	Sensitivity Analysis for Uncertainty Quantification & Improved Accuracy in Nuclear Reactor Core Simulations	Model Development: Fischer-Topsch Synthesis & Product Refining	Integration of a Structural Water Gas Shift Catalyst with a Vanadium Alloy Hydrogen Transport Device	Investigation of nanospheres for general lighting application	Recoverable Enzyme Nanoparticle Systems for Cellulose Hydrolysis	Three-Phase Relative Permeabilities for Enhanced Oil Recover Schemes	Fault Seal on Low-Angle Normal Faults Shapes, Scales, & Spacings of Channel-belt Sand Bodies in Avulsion-dominated Alluvial Basins	Funding from External Organization Received & MGF Funds Paid Organization Proposal	FY07 & FY08 Total Total # Proposals FY 2007	FY07 Subtotal # Proposals	Aerodynamics & Control of Wind Turbines Sustainable Photosynthetic H2 Production	FY 2007 Funding from External Organization Denied tion Proposal
9	\$479,092	\$12,492	\$70,000	\$50,000	\$100,000	\$50,000	\$51,600	\$80,000	\$15,000 \$50,000	MGF Funds	\$1,666,859 28	\$200,000 2	\$100,000 \$100,000	MGF Funds
	\$1,169,518	\$12,492	\$287,426	\$50,000	\$100,000	\$120,000	\$284,600	\$200,000	\$15,000 \$100,000	External Funds		\$887,500	\$450,000 \$437,500	External Funds
	\$1,648,610	\$24,984	\$357,426	\$100,000	\$200,000	\$170,000	\$336,200	\$280,000	\$30,000 \$150,000	Total Funds		\$1,087,500	\$550,000 \$537,500	Total Funds