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 Schlumberger 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, Subhashis 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)

Update on Energy Related Curriculum Plans
Andy Hansen gave an update on energy related curriculum plans. (Energy Related Curriculum Plans)
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 A

Drafted Minutes of the UW Energy Resource Council
November 16, 2007

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 (by phone)
Rob Hurless- Energy and Telecommunications Policy Advisor
Harold Bergman - Ex officio, Director, RIENR
Senator Charles Townsend
Tom Stroock – CEO, Alpha Development Corp; former US Ambassador

Members absent:
Paul Lang – President Western Operations, Arch Coal Inc.
Tom Buchanan - Ex officio, UW President
Bobby Shackouls – Chairman, Burlington Resources Inc. (retired)
Rob Wallace – Manager, Government Relations, G.E. Energy

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 September 21, 2007 minutes be accepted. The motion was passed unanimously. (Minutes Appendix A)

The agenda was amended with the addition of item 13, “Research and Outreach”. Lockhart motioned to accept the amended agenda, and Senator Townsend seconded it. It was unanimously passed. (Agenda – Appendix B)

Update on ERC Selection Process
Chairman Harper requested suggested candidates by the ERC who would be good candidates to replace Mark Davies. These candidates should have a mining background, along with a clean coal technology background.

Update on Professorship Searches
Mark Northam gave an update on the eight professorship searches underway. They include: Chemistry, Sr. Petroleum Engineering, Energy Economist, Geophysics, Coal Process Engineering, Arid Lands Reclamation Ecology, Mathematics, (joint position with NCAR) and Wind Energy. The Wind Energy is a 2009 position, but Northam requested the ERC approve to move forward with it now. Tom Stroock made a motion to do so, and Lockhart seconded it. The motion was passed.

Update on Academic Activities
Northam gave an update on the priority of hiring an Associate Director of Academics. The name of the position was changed from “Academic Coordinator”. Lockhart emphasized the priority of hiring an Associate Director of Academics.
Northam’s other academic updates included another RFP for Graduate Assistantships occurring, inclusion of qualified Shoshone and Arapahoe students and teachers in the Energy Summer Institute, more SER involvement with the Dean’s from UW colleges, an update on the Academic Council’s activities (which included development of an industry survey and development of the curriculum for the degree program), and working with the College of Law to develop information on policy related to energy issues. Rattie added that there is a need for Wyoming representation in Washington, D.C.

Bill Gern, VP of Research & Economic Develop Office, encouraged SER to work with existing groups on campus to develop relationships with the Shoshone and Arapahoe.

**Update on Matching Grant Funds**
Northam gave an update on matching grant funds. (Appendix C)

**Update on Financial Report**
Northam gave an update of expenditures through October 31, 2007. (Appendix D) Northam clarified an “Overview of Recent Changes to the SER Budget due to Changes in Ramp-up for Fiscal Years 2008-2010”. (Appendix E)

Harper conveyed concerns as to how salaries are paid by SER when the faculty is housed in a home department, and may teach classes not connected to SER. Harold Bergman clarified that this maintains good interdisciplinary relationships, and can lead to the recruitment of students for the SER degree program.

**Discussion of Involvement with WIA**
Harper cautioned that the Council needs to stay focused on its continued efforts to build the foundation for the future of the SER. Harper will contact Mike Easley, WIA chairman to discuss joint opportunities, but express interest our focus.

**Carbon Management Project**
Northam explained the benefits to adding a CO$_2$ Research Center. Tom Stroock made a motion to accept moving forward with the center, and Lockhart seconded it. The motion was passed.

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

**Break For Joint Board of Trustee Meeting and Lunch**
The ERC adjourned at approximately 10:45-12:45 for a joint Board of Trustee meeting. The ERC meeting was resumed at approximately 1:00.

**Update on Fundraising**
Ben Blalock from the Foundation gave an update. (Appendix F) Northam stated that Phill Harris, VP of Administration’s Office, would be putting together a design team for the SER building in January. Northam suggested a website be made available for people to see how the new building progresses.

Chris Spooner explained the three types of state matching funds for clarification of how the state matches gifted funds.
Discussion of “Creation of the Future 1”
ERC members appreciated the University planning document for 2009-2014. A copy can be read at http://uwadmnweb.uwyo.edu/acadaffairs/univ_plan/creating_the_future_1.pdf.

Research and Outreach
Northam updated the ERC on recent progress made in forming new SER-affiliated research centers. Those discussed included the Coalbed Natural Gas, Renewable Energy, Wyoming Reclamation, and Wind Energy Research Centers.

Other Business
Northam explained that the Petroleum Technology Transfer Council of the AAPG, combined with SPE, provides producers with low cost workshops and information focused on engineering, geology, and geophysics. They would like to create a Regional Lead Organization at UW SER, in addition to one at Colorado School of Mines, to facilitate offering those workshops. Northam will pursue further clarification concerning how SER and CSM would coordinate activities to avoid duplication and competition.

Northam also explained the concept for two Carbon Management workshops which included working with EORI and SENR following the Finding the Balance summit, along with the idea of participating in the Power Gen and Expo with the Wyoming Business Council in New Orleans.

Northam reported that the UW Dean’s wish to be more involved with SER, and would like to be invited to the next ERC meeting. They would be asked to present an agenda item and brief ahead of time.

Tom Stroock requested the focus of SER would be on academics instead of outreach at this time. Harper added that Northam had the support of the ERC during this demanding time.

Action Items
- Chairman Harper will write a selection policy and distribute to council members for discussion at the next meeting.
- Northam has requested to give monthly updates instead of quarterly ones. The ERC unanimously supported this idea. They will be noted on a revised distribution of the 2008 calendar.
- A revised calendar will be sent out.

Future Meetings
The next ERC meeting has been changed from February 22, 2008 to March 14, 2008 due to the Legislature meeting, and is noted on the revised calendar.

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
March 14, 2008 Energy Resource Council Meeting

1) Review of minutes from 11/16/07 and 3/14/08 agenda.

2) Discussion and action of electing officers

3) Update on fundraising – Ben Blalock

4) Update on faculty and staff hires – KJ Reddy, Mark Northam

5) Update on matching grant funds – Mark Northam

6) Financial Report – Mark Northam

7) Update on legislative session – Rick Miller

8) 2009-2010 budget plan – Mark Northam

9) WRI- Introduction of Director, Don Collins – Bill Gern

10) GE update – Bill Gern

11) Working lunch with Academic Deans
    • Faculty search update – Deans and KJ Reddy
    • College of Law Energy Practice – Jerry Parkinson
    • Options for remaining faculty positions – Mark Northam
    • Carbon storage demonstration earmark – Northam/Gern

Deans in attendance:
Dean Rob Ettema – Engineering
Dean Frank Galey – Agriculture
Dean Jerry Parkinson – Law

12) Update on academic activities – KJ Reddy 1:00

13) Update on energy-related curriculum plans – Andy Hansen & Rob Ettema

14) Clean Coal Workshop – April 10-11, 2008 in Queensland

15) Upcoming meetings- May 23, 2008
Appendix C

University of Wyoming School of Energy Resources

Major Corporate Prospects

**Gift Commitments Received:**
EnCana Oil & Gas, Inc. ($7 million)
BP America, Inc. ($5 million)
Jim Nielson ($5 million)
Shell Oil Company ($2 million)
Marathon Oil Company ($1 million)
ConocoPhillips ($500,000)
Questar ($30,000)
Schlumberger (software $26.3 million)
Halliburton (software $5.5 million)

**SER Center:** $18.9 million w/state match
**SER Endowments:** $10.2 million w/state match
**PE Program:** $10.9 million w/state match
**G&G Program:** $670,000 w/state match
**In-Kind:** $31.8 million

**Initial Conversations Underway:**
Anadarko Petroleum Corporation
(Planning a $2-3 million ask)
Ultra Petroleum (awaiting a BLM ruling)

**Proposed Next Prospects:**

**Oil and Gas:**
Chevron
Citation Oil and Gas Corp.
Devon Energy Corporation
EOG Resources
Exxon Mobil
Forest Oil
J.M. Huber Corp.
Merit Energy Co.
MidAmerican Energy Holding Co.
Williams Production Company
XTO Energy, Inc.
Yates Petroleum

**Coal:**
Arch Coal, Inc.
Peabody
Rio Tinto Energy America

**Transportation:**
Other Prospects:

Alpha Development Corp.
Anschutz Company
Baker Hughes
Basin Electric and Basin Coop.
Bill Barrett Corp.
Cabot Oil & Gas Corp.
Cogema Mining, Inc.
DKRW
FMC Corp.
Foundation Coal West
GE Energy
Kiewit Mining Group
Kinder Morgan
Lance Oil and Gas Co.
Nabors Drilling USA
Nerd Gas
Pathfinder Mines Corp.
Pennaco Energy, Inc.
Pittsburg and Midway Coal
Power Resources, Inc.
Siemens
Sinclair
True Oil
U.S Energy Corp.
Westport Oil & Gas Co.
Wold Oil Properties
Wyodak Resources
University of Wyoming School of Energy Resources

Major Corporate Prospects

Gift Commitments Received:

EnCana Oil & Gas, Inc. ($7 million)
BP America, Inc. ($5 million)
Jim Nielson ($5 million)
Shell Oil Company ($2 million)
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Forest Oil
J.M. Huber Corp.
Merit Energy Co.
MidAmerican Energy Holding Co.
Williams Production Company
XTO Energy, Inc.
Yates Petroleum

Coal:
Arch Coal, Inc.
Peabody
Rio Tinto Energy America

Transportation:
Burlington Northern Santa Fe
Union Pacific

Other Prospects:

Alpha Development Corp.
Anschutz Company
Baker Hughes
Basin Electric and Basin Coop.
Bill Barrett Corp.
Cabot Oil & Gas Corp.
Cogema Mining, Inc.
DKRW
FMC Corp.
Foundation Coal West
GE Energy
Kiewit Mining Group
Kinder Morgan
Lance Oil and Gas Co.
Nabors Drilling USA
Nerd Gas
Pathfinder Mines Corp.
Pennaco Energy, Inc.
Pittsburg and Midway Coal
Power Resources, Inc.
Siemens
Sinclair
True Oil
U.S Energy Corp.
Westport Oil & Gas Co.
Wold Oil Properties
Wyodak Resources

January 29, 2009
Appendix D

ERC Update
School of Energy Resources
Status of Faculty Position Searches FY 2007-2008 (As of March 6, 2008)

Mathematics – Numerical modeling of reservoir fluid flows (Senior Faculty Position)
  • Dr. Felipe Pereria has been hired (Short CV is attached).
  • He begins his position on 1/1/2008.

Chemistry – Energy storage, chemical conversion or renewable energy resources (1 Senior Faculty Position)
  • Dr. Bruce Parkinson has been accepted the offer and will be on-campus Fall 2008 (Short CV is attached).

Geology – Energy-related geophysics (1 Senior Faculty Position and 1 Junior Faculty Position)
  • Received 30 applications.
  • 5 candidates were interviewed in December and January 2008.
  • 2 candidates, 1 senior faculty and 1 junior faculty were offered the positions.
  • Both candidates accepted the offers and will be on-campus Fall 2008. (Short CVs are attached).

Chemical & Petroleum Engineering – Coal-related technologies (Junior Faculty Position)
  • Received over 40 applications.
  • Interviews are underway for 4 candidates.

Renewable Resources – Energy related Land Reclamation/Restoration Ecologist (Senior Faculty Position)
  • Received over 15 applications.
  • Interviews will be conducted in March and April, 2008 for 4 candidates.

Chemical & Petroleum Engineering – Petroleum engineering (Senior Faculty Position)
  • Received over 20 applications. None appropriate for senior faculty position.
  • Search committee met and narrowed the applicants to 4 candidates for interviews.
  • First 2 candidates will be invited for interviews in March 2008.

Mathematics – Reservoir modeling and porous-media flow analysis
  • Interviews are underway for 4 candidates.
Mechanical Engineering – Wind energy

- Advertising for this position started on 1/7/2008
- In the process of receiving applications.

Economics & Finance – Energy markets and economics

- As of 1/10/2008, 9 applicants have applied.
- Candidates will be selected for campus visits in late February and visits will be booked in March.
- Application period remains open and College of Business will continue to recruit additional candidates through personal contacts and cajoling.
- Market is very competitive currently; our offer is on the low side.
## Appendix E

### School of Energy Resources
Matching Grant Fund
March 2008 Status Summary

<table>
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<tr>
<th>Fiscal Year</th>
<th>Category</th>
<th># of Projects</th>
<th>Dollars Committed</th>
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Remaining FY 2008 Potential Impact 8 $475,917
## Appendix F

School of Energy Resources Expenditure Report through February 2008

FY07-08 Budget $ 12,071,997
NCAR Reduction $ 2,000,000
FY07-08 Budget $ 10,071,997

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</tbody>
</table>

**Totals no longer reflect reduction for NCAR (see end of report)**

**Dr. Po Chen will begin employment in April 2008. This figure includes his salary, benefits, & startup funds.**

($271,352)
<table>
<thead>
<tr>
<th></th>
<th>FY 07 budget</th>
<th>FY 08 budget</th>
<th>FY08 Expenditures</th>
<th>Cash Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESEARCH</strong></td>
<td></td>
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<tr>
<td>Technical &amp; Support Staff</td>
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<tr>
<td>Support</td>
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<td>$518,550</td>
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<tr>
<td><strong>Totals</strong></td>
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<td>$518,550</td>
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<td>Half-time Faculty Appointment</td>
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<td><strong>Totals</strong></td>
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<td>$820,198</td>
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<td>Startup Assistance Fund</td>
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<td>Zhang startup</td>
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<tr>
<td>Solar &amp; Fuel Cells</td>
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<td>CBM Group</td>
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<td>Arid Lands</td>
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<tr>
<td><strong>Totals</strong></td>
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<td><strong>Grant Matching Fund</strong></td>
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<tr>
<td>Original Budget</td>
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<tr>
<td>David Bell</td>
<td>($50,000)</td>
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<td>Paul Heller</td>
<td>($50,000)</td>
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<td>Mohammad Piri/Laforce</td>
<td>($80,000)</td>
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<td>Jinke Tang</td>
<td>($50,000)</td>
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<td>Dale Woods/Krall</td>
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<td>Argyle/Batron</td>
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<td>Campbell-Stone/Barbara John</td>
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<td>Patrick Johnson</td>
<td>($51,600)</td>
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<tr>
<td>Jeff Beck</td>
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<td>Mavropolis, Dimitri</td>
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<td>($70,000)</td>
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<td>Sponsored Programs</td>
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<td>FY08 Obligations</td>
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<td>Pending Obligations</td>
<td>($297,600)</td>
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<td>$297,600</td>
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<tr>
<td><strong>Grant Matching Fund Totals</strong></td>
<td>($210,200)</td>
<td>$789,800</td>
<td>($744,003)</td>
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<tr>
<td><strong>TOTALS Research</strong></td>
<td>$908,949</td>
<td>$2,819,048</td>
<td>($811,503)</td>
<td>$387,297</td>
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</tbody>
</table>

**Totals no longer reflect reduction for NCAR (see end of report)**
### School of Energy Resources Expenditure Report through February 2008

FY07-08 Budget: $12,071,997  
NCAR Reduction: $2,000,000  
FY07-08 Budget: $10,071,997

<table>
<thead>
<tr>
<th>STATEWIDE OUTREACH</th>
<th>FY 07 Budget</th>
<th>FY 08 Budget</th>
<th>FY08 Expenditures</th>
<th>Cash Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Budget</td>
<td>$561,000</td>
<td>$777,000</td>
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<tr>
<td>Support Services</td>
<td>($2,741)</td>
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<td>Publications</td>
<td>($27,755)</td>
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<tr>
<td>Stroock Forum - $26,500 total obligation</td>
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<td>Stroock Forum - expenses</td>
<td>($6,341)</td>
<td>($2,080)</td>
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<td>WRI- $201,565-FY07 obligation</td>
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<td>WRI expenses</td>
<td>($201,565)</td>
<td>($5,782)</td>
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<td>Earthscope-$7,900</td>
<td>($7,900)</td>
<td>$88,475</td>
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<td>Cost analysis for WIA</td>
<td>($26,500)</td>
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<td>AMRA</td>
<td>($5,000)</td>
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<td>WCC</td>
<td>($10,000)</td>
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<td>Finding the Balance</td>
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<td>C3</td>
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<tr>
<td>One Time Energy Related Support</td>
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<td><strong>TOTALS OUTREACH</strong></td>
<td><strong>$273,198</strong></td>
<td><strong>$1,050,198</strong></td>
<td><strong>($25,774)</strong></td>
<td><strong>$378,987</strong></td>
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</table>

**Totals no longer reflect reduction for NCAR (see end of report)**

### ADMINISTRATION

<table>
<thead>
<tr>
<th>Director's Office</th>
<th>FY 07 Budget</th>
<th>FY 08 Budget</th>
<th>FY08 Expenditures</th>
<th>Cash Balance</th>
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</thead>
<tbody>
<tr>
<td>Original Budget</td>
<td>$513,100</td>
<td>$513,100</td>
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<tr>
<td>Salaries, EPB, PT</td>
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<td>($185,941)</td>
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<td>Support Services</td>
<td>($99,579)</td>
<td>($64,522)</td>
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<td>ERC Support</td>
<td>($12,806)</td>
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<td>Furniture</td>
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<td>Equipment</td>
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<td>Moving Expenses</td>
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<tr>
<td>FY07 carry over expenses</td>
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<tr>
<td>Director Search</td>
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<td>Building Renovations</td>
<td>($130,000)</td>
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<td><strong>TOTALS Administration</strong></td>
<td><strong>($125,089)</strong></td>
<td><strong>$388,011</strong></td>
<td><strong>($248,791)</strong></td>
<td><strong>$2,008,813</strong></td>
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</tbody>
</table>

Total Appropriation: $12,071,997  
Total NCAR Reduction: $2,000,000  
Total Expenditures 2007: $2,849,232  
Total Expenditures 2008: $3,134,529  
Cash Balance as of March 1, 2008: $4,088,236  
Carry over to 2009-2010: ($2,020,177)  
Total Cash left: $2,068,059
## REvised Staged Funding for a School of Energy Resources

<table>
<thead>
<tr>
<th></th>
<th>FY 2007 Spent</th>
<th>FY '08 New Funding</th>
<th>FY '09 New Funding</th>
<th>FY '10 New Funding</th>
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<tbody>
<tr>
<td><strong>ACADEMICS</strong></td>
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<tr>
<td>Academic coordinator's office</td>
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<td>$128,325</td>
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<td>$0</td>
<td>$502,520</td>
<td>$649,145</td>
<td>$691,568</td>
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<tr>
<td>Distinguished faculty positions</td>
<td>$677,955</td>
<td>$1,162,500</td>
<td>$1,911,000</td>
<td>$3,194,100</td>
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<tr>
<td>Visiting professorships</td>
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<td>$0</td>
<td>$301,200</td>
<td>$626,496</td>
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<tr>
<td>Distinguished teaching internships</td>
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<td>$0</td>
<td>$128,800</td>
<td>$267,904</td>
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<tr>
<td>Summer program for high school students</td>
<td>$60,579</td>
<td>$69,000</td>
<td>$71,360</td>
<td>$71,611</td>
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<tr>
<td>Other Support</td>
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<td>$345,000</td>
<td>$1,130,000</td>
<td>$1,130,000</td>
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<tr>
<td><strong>Subtotal: Academics</strong></td>
<td><strong>$886,149</strong></td>
<td><strong>$2,207,945</strong></td>
<td><strong>$4,409,827</strong></td>
<td><strong>$6,208,734</strong></td>
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<tr>
<td><strong>RESEARCH</strong></td>
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<tr>
<td>Institute for Energy Research staff</td>
<td>$0</td>
<td>$285,750</td>
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<tr>
<td>Half-time faculty appointments</td>
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<td>$24,200</td>
<td>$275,335</td>
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<tr>
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<td>$1,275,000</td>
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<tr>
<td><strong>Subtotal: Research</strong></td>
<td><strong>$1,019,700</strong></td>
<td><strong>$1,669,950</strong></td>
<td><strong>$2,249,634</strong></td>
<td><strong>$2,851,781</strong></td>
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<td><strong>OUTREACH &amp; SERVICE</strong></td>
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<tr>
<td>Energy Outreach Center</td>
<td>$0</td>
<td>$156,000</td>
<td>$494,880</td>
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<td>Consulting specialists</td>
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<td>Other Outreach</td>
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<td><strong>Subtotal: Statewide Outreach &amp; Service</strong></td>
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<td><strong>$700,000</strong></td>
<td><strong>$1,134,920</strong></td>
<td><strong>$1,262,126</strong></td>
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<td><strong>ADMINISTRATION</strong></td>
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<td>Director's office</td>
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<tr>
<td>Total actual expenditures</td>
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<tr>
<td>Amount redirected to NCAR project</td>
<td><strong>$2,000,000</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,850,000</strong></td>
<td><strong>$5,201,820</strong></td>
<td><strong>$8,443,263</strong></td>
<td><strong>$10,997,479</strong></td>
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</tbody>
</table>

Annual support inflator = 1.04
Annual salary inflator = 1.04
Benefits multiplier = 0.35
Benefits rate = 35%