

**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 Hurlless- 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<sub>2</sub> 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](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 A

### **Drafted 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/](http://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 B

### **Agenda November 16, 2007 Energy Resource Council Meeting**

- 1) Review of minutes from 9/21/07 and 11/16/07 agenda.
- 2) Update on selection process for ERC
- 3) Update on professorship searches
- 4) Update on academic activities
- 5) Update on Matching Grant Funds
- 6) Update on fundraising
- 7) Financial Report
- 8) Discussion of ERC involvement with WIA
- 9) Carbon Management Project
- 10) Clean Coal Workshop – April 10-11, 2008 in Queensland
- 11) Discussion on “Creation of the Future 1”
- 12) Upcoming meetings- Next meeting February 22, in Laramie, WY.

## Appendix C

### School of Energy Resources Matching Grant Fund October 2007

#### FY 2008

Agreed to Provide Matching Funds-Waiting for Approval from External Organization			
PI	External Organization	Proposal	MGF Funds
**Naughton, Jonathan	National Science Foundation	Aerodynamics & Control of Wind Turbines	\$100,000
Debashis, Dutta	American Chemical Society	Characterization of Sodium Silicate Derived Polymer Electrolyte Membrane Structures for Microchip based Portable Fuel Cells	\$50,000
Zhou, Jing	American Chemical Society	Atomic-scale understanding & tuning of chemical reactivity of ceria-based metal catalysts toward water-gas shift reaction	\$50,000
Carrapa, Barbara	American Chemical Society	Dynamics of deformation & basin development during Sevier & Laramide orogeny	\$50,000
Alvarado, Vladimir	American Chemical Society	Dynamics of solid-stabilized emulsions in porous media	\$50,000
Argyle, Morris	Jupiter Oxygen	Mercury Removal from Flue Gas Derived from Oxygen Combustion of Coal	\$25,000
Lyng, Gregory	National Science Foundation	Analysis & Computation of Spectral Stability in Combustion, Gas Dynamics, & Porous Media	\$41,236
Beck, Jeffrey	Wyoming Wildlife & Natural Resource Trust and USDI Bureau of Land Management	Identifying Disturbance Mechanisms Influencing Habitat Selection by Elk in Natural Gas Development Fields	\$60,000
<b>FY08 Subtotal</b>			\$426,236
<b># Proposals</b>			8

#### FY 2007

Agreed to Provide Matching Funds-Waiting for Approval from External Organization			
PI	Organization	Proposal	MGF Funds
Argyle, Morris	Idaho National Laboratory	Nonthermal Plasma Reactors for the Decomposition of H <sub>2</sub>	\$25,000
**Naughton, Jonathan;	Department of Energy	Aerodynamics & Control of Wind Turbines	\$100,000
Bagley, David	Department of Energy	Sustainable Photosynthetic H <sub>2</sub> Production	\$100,000
<b>FY07 Subtotal</b>			\$225,000
<b># Proposals</b>			3
<b>FY07 &amp; FY08 Total</b>			\$651,236
<b>Total # Proposals</b>			11

#### FY 2007

Funding from External Organization Received & MGF Funds Paid			
PI	Organization	Proposal	MGF Funds
Mavriplis, Dimitri	Department of Energy	Sensitivity Analysis for Uncertainty Quantification & Improved Accuracy in Nuclear Reactor Core Simulations	\$70,000
<b>FY07 Subtotal</b>			\$70,000
<b># Proposals</b>			1

\*\*Will be matched either in FY07 or FY08



**Appendix D**

**School of Energy Resources Expenditure Report through October 31, 2007**

FY07-08 Budget \$ 12,071,997

NCAR Reduction \$ 2,000,000

FY07-08 Budget \$ 10,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures
<b>ACADEMICS</b>			
<b>Coordinator's Office</b>			
<b>Original Budget</b>	\$132,300	\$765,900	
Expended:			
Salaries & EPB's	(\$98,322)		(\$27,368)
Support Services:			(\$5,567)
Graduate Assistantships			(\$378,027)
<b>Totals</b>	\$33,978	\$799,878	(\$410,962)
<b>Distinguished Faculty</b>			
<b>Original Budget</b>	\$1,104,000	\$2,208,000	
Transferred			
A&S (Math & Geophysics)	(\$202,955)		(\$520,000)
Business (Economics & Finance)	(\$160,000)		
Engineering(Civil & Petroleum)	(\$240,000)		(\$300,000)
EPB Account	(\$75,000)	\$75,000	
Buttry-Chemistry-Salary EPB			(\$39,444)
Pereria-Math Faculty-Salary, EPB, Startup			(\$348,003)
Faculty Search Expenses			(\$38,000)
Bryan Shuman-Geology-Startup			(\$50,000)
Support Services:			(\$3,574)
Distinguished Speaker Support	(\$15,620)		
<b>Totals</b>	\$410,425	\$2,693,425	(\$1,299,021)
<b>Visiting Professorships</b>			
<b>Original Budget</b>	\$0	\$300,000	
<b>Totals</b>	\$0	\$300,000	\$0
<b>Teaching Internships</b>			
<b>Original Budget</b>	\$101,000	\$202,000	
ENR support			(\$100)
World Energy Congress support			(\$1,000)
Course Development Awards:			
Chemistry	(\$26,500)		
Civil & Arch. Engineering	(\$7,793)		
Geology	(\$15,000)		
Math T-Shirts	(\$1,025)		
Anne Alexander to China	(\$747)		
<b>Totals</b>	\$49,935	\$251,935	(\$1,100)
<b>Summer Program for H.S. Students</b>			
<b>Original Budget</b>	\$63,600	\$63,600	
Expended:	(\$60,579)		(\$4,000)
<b>Totals</b>	\$3,021	\$66,621	(\$4,000)
<b>TOTALS Academics</b>	\$497,359	\$4,111,859	(\$1,715,083)

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

**School of Energy Resources Expenditure Report through October 31, 2007**

FY07-08 Budget \$ 12,071,997

NCAR Reduction \$ 2,000,000

FY07-08 Budget \$ 10,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures
<b>RESEARCH</b>			
<b>Technical &amp; Support Staff</b>			
Original Budget	\$518,550	\$518,550	
Totals	\$518,550	\$518,550	\$0
<b>Half-time Faculty Appointment</b>			
Original Budget	\$410,099	\$820,198	
Totals	\$410,099	\$820,198	\$0
<b>Startup Assistance Fund</b>			
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
<b>Grant Matching Fund</b>			
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)		
Mavriopolis, Dimitri			
Sponsored Programs			(\$100,000)
FY08 Obligations			(\$226,236)
Pending Obligations	(\$297,600)		
Grant Matching Fund Totals	(\$210,200)	\$789,800	(\$326,236)
<b>TOTALS Research</b>	<b>\$908,949</b>	<b>\$2,819,048</b>	<b>(\$326,236)</b>

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

**School of Energy Resources Expenditure Report through October 31, 2007**

FY07-08 Budget \$ 12,071,997

NCAR Reduction \$ 2,000,000

FY07-08 Budget \$ 10,071,997

	FY 07 budget	FY 08 budget	FY08 Expenditures
<b>STATEWIDE OUTREACH</b>			
Original Budget	\$561,000	\$777,000	
Support Services	(\$2,741)		(\$407)
Publications	(\$27,755)		
Stroock Forum - \$26,500 total obligation			
Stroock Forum - expenses	(\$6,341)		(\$2,080)
WRI- \$201,565-FY07 obligation			
WRI expenses	(\$201,565)	\$88,475	(\$5,782)
Earthscope-\$7,900	(\$7,900)		
Cost analysis for WIA	(\$26,500)		
AMRA	(\$5,000)		
WCC	(\$10,000)		(\$10,000)
Finding the Balance			(\$85,000)
C3			(\$3,000)
One Time Energy Related Support			(\$1,825)
<b>TOTALS OUTREACH</b>	<b>\$273,198</b>	<b>\$1,138,673</b>	<b>(\$108,094)</b>

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

	FY 07 budget	FY 08 budget	FY08 Expenditures
<b>ADMINISTRATION</b>			
Director's Office			
Original Budget	\$513,100	\$513,100	
Salaries, EPB, PT	(\$185,753)		(\$100,378)
Support Services	(\$99,579)		(\$11,176)
ERC Support	(\$12,806)		(\$2,394)
Furniture	(\$69,153)		(\$14,840)
Equipment	(\$12,597)		(\$6,101)
Moving Expenses			(\$5,426)
FY07 carry over expenses			(\$1,131)
Director Search	(\$128,301)		
Building Renovations	(\$130,000)		
<b>TOTALS Administration</b>	<b>(\$125,089)</b>	<b>\$388,011</b>	<b>(\$141,447)</b>

Total Appropriation	\$12,071,997
Total NCAR Reduction	(\$2,000,000)
Total Expenditures 2007	(\$2,849,232)
Total Expenditures 2008	(\$2,290,860)
Cash Balance as of October, 2007	\$4,931,905

## Appendix E

### **Overview of Recent Changes to the SER Budget Due to Changes in Ramp-Up Fiscal Years '08, '09, and '10 November 12, 2007**

The Governor's Office recently requested that we revise the School of Energy Resources' spending outlook for FY '08 and for the next biennium due to the slower pace of ramp-up we are experiencing. To that end, we have constructed a new plan and reported that approximately \$2 million will remain at the end of Fiscal Year '08, and that the next biennium's budget can be reduced by \$1.2 million versus the original plan. Roughly speaking, the revised plan amounts to ramping up SER's budget over four years instead of three. The "steady state" budget beyond the 2009-2010 biennium is anticipated to remain unchanged except for the effects of salary raises during the interim.

Table 1 presents a high-level overview of the budget reduction forecast. The following sections will present more detail for how we arrived at these figures.

<b>FY</b>	<b>Total Spent ('07) or Planned</b>	<b>Total Budgeted in 2005 Plan</b>	<b>Difference</b>	<b>Comments</b>
2007	\$4,850,000	\$4,403,649		Includes \$2M redirected to NCAR
2008	<u>\$5,201,820</u>	<u>\$7,668,348</u>		
<b>1<sup>st</sup> Biennium</b>	<b>\$10,051,820</b>	<b>\$12,071,996</b>	<b>\$2,020,176</b>	
2009	\$8,443,263	\$9,799,447		Includes salary raises ("external cost adjustment")
2010	<u>\$10,997,479</u>	<u>\$10,879,550</u>		Includes salary raises ("external cost adjustment")
<b>2<sup>nd</sup> Biennium</b>	<b>\$19,440,743</b>	<b>\$20,678,997</b>	<b>\$1,238,254</b>	Full funding after FY10 – \$10.9M/year + ECA

Table 1: Overview of budget reductions proposed for the remainder of the 1<sup>st</sup> Biennium and for the 2<sup>nd</sup> Biennium.

#### FY '07

The original SER appropriation for the Fiscal Year 2007-2008 biennium was just over \$12 million. In early 2007, \$2 million was transferred out of the SER budget to support the establishment of the NCAR partnership. Combining the \$2 million for NCAR and actual expenditures for SER business, \$4.85 million hit the bottom line for FY '07, exceeding the original plan by \$0.45 million. This is the same bottom line that was reported to the ERC at the September 11<sup>th</sup> meeting.

#### FY '08

We currently anticipate spending \$5.2 million in Fiscal Year 2008, a reduction of approximately \$2.46 million vs. the original plan (Table 1). Most of the reduction has been driven by the delay in hiring distinguished faculty. Table 2 contains more detail concerning how the reduced spending spreads across our budget.

	FY 2007 Spent	FY '08 Plan Funding	FY '08 New Funding	FY 2008 Variance	FY '09 Plan Funding	FY '09 New Funding	FY 2009 Variance	FY '10 New Funding
<b>ACADEMICS</b>								
Academic coordinator's office		\$132,300	\$128,325		\$132,300	\$278,055	\$86,022	\$227,055
Undergrad research fellowship stipends		\$633,600	\$502,520		\$633,600	\$649,145	\$15,545	\$691,568
Distinguished faculty positions		\$2,208,000	\$1,162,500		\$3,312,000	\$1,911,000	(\$1,401,000)	\$3,194,100
Visiting professorships		\$300,000	\$0		\$600,000	\$301,200	(\$298,800)	\$626,496
Distinguished teaching internships		\$202,000	\$0		\$303,000	\$128,800	\$174,200	\$267,904
Summer program for high school students		\$63,600	\$69,000	\$5,400	\$63,600	\$71,360	\$7,760	\$71,611
Other Support		\$0	\$345,000	\$345,000	\$0	\$1,130,000	\$1,130,000	\$1,130,000
Subtotal: Academics		\$3,539,500	\$2,207,945		\$5,044,500	\$4,409,827	(\$634,673)	\$6,208,734
<b>RESEARCH</b>								
Institute for Energy Research staff		\$518,550	\$285,750		\$518,550	\$474,300	(\$44,250)	\$653,692
Half-time faculty appointments		\$820,198	\$24,200		\$1,230,296	\$275,335	(\$954,961)	\$402,491
Other Research Funding		\$1,500,000	\$1,360,000		\$1,500,000	\$1,275,000	(\$225,000)	\$1,450,000
Subtotal: Research		\$2,838,748	\$1,669,950		\$3,248,846	\$2,249,634	(\$999,212)	\$2,851,781
<b>OUTREACH &amp; SERVICE</b>								
Energy Outreach Center		\$561,000	\$156,000		\$561,000	\$494,880	(\$66,120)	\$602,285
Consulting specialists		\$216,000	\$54,000		\$432,000	\$224,640	(\$207,360)	\$233,626
Other Outreach		\$0	\$490,000	\$490,000	\$0	\$415,400	\$415,400	\$426,216
Subtotal: Statewide Outreach & Service		\$777,000	\$700,000		\$993,000	\$1,134,920	\$141,920	\$1,262,126
<b>ADMINISTRATION</b>								
Director's office		\$513,100	\$623,925	\$110,825	\$513,100	\$648,882	\$135,782	\$674,837
Total actual expenditures	\$2,850,000							
Amount redirected to NCAR project	\$2,000,000							
<b>TOTAL</b>	<b>\$4,850,000</b>	<b>\$7,668,348</b>	<b>\$5,201,820</b>		<b>\$9,799,446</b>	<b>\$8,443,263</b>	<b>(\$1,356,183)</b>	<b>\$10,997,479</b>

Table 2. Comparison of Original Plan vs. Current Outlook for the SER Budget. Salaries and budgets are multiplied in FY '09 and '10 by 4% each to account for raises and inflation.

The outlook for Academics spending has been reduced by \$1.33 million due to the slower pace of hiring that resulted in:

- elimination of 18 undergraduate fellowships;
- elimination of support funds for the unfilled distinguished faculty positions;
- elimination of 1 visiting professorship and 2 distinguished internships.

Reductions in the above area were offset by the addition \$345 thousand in additional support for course development, faculty searches, and new faculty start-up funds that were not part of the original plan.

The outlook for Research spending has been reduced by \$1.17 million. This reduction is also heavily influence by the slower pace of distinguished faculty hiring. In the research arena, we:

- eliminated 2 postdoctoral fellowships, 2 technician positions and 1 administrative assistant position;
- eliminated all 6 half-time faculty positions;
- eliminated 5 of 6 planned graduate research assistant stipends;
- reduced faculty start-up support for non-SER faculty.

These reductions were slightly offset by adding \$250 thousand in Research Center seed money.

The outlook for Outreach and Service spending remained relatively the same, although spending was redistributed somewhat. Personnel costs for the Director of Outreach and an editorial staff were reduced by \$0.4 million, but support for travel, workshops, and contributions to outside groups offset the reduction.

The outlook for Administrative spending has increased by about \$100 thousand, largely due to increased support costs for travel and setting up operations.

### **FY '09**

The Fiscal Year 2009 budget will also be impacted by the slower pace of distinguished faculty hiring. The original plan anticipated that spending would total \$9.8 million. Our current plan estimates that \$8.5 million will be spent (Table 2).

Outlook for FY'09 Academic spending has been reduced by \$0.6 million. The reduction is once again heavily influenced by the slower than anticipated hiring of distinguished faculty. We currently anticipate that 7 of the planned 12 distinguished faculty positions will be filled. We further anticipate that we will be supporting 1 visiting professor and 1 distinguished teaching intern rather than 2 and 3 respectively. Salary-related savings are partially offset by the addition of \$1 million in new faculty start-up funds, a necessary category of spending that was omitted from the original plan.

Outlook for FY '09 Research Spending has been reduced by nearly \$1 million. The bulk of the reduction is accounted for by the reduction in half-time faculty appointments. The original plan

anticipated 9 half-time appointments, but the current plan anticipates only 2. Graduate assistantships meant to support those appointments have been reduced by the same amount. The rationale for these reductions is that the matching grants fund and research center seed money will continue to stimulate the research that the half-time appointees were meant to accomplish. Half-time appointees will ramp up to full capacity once the Energy Resources Center is commissioned.

Outlook for FY '09 Outreach and Services and for Administration has increased slightly versus the original plan. Savings anticipated from reduction of editorial and consulting staff are offset by increases to the support budgets (travel, contributions, workshops, etc.).

### **FY '10**

The original plan anticipated that the first three years of SER would complete the ramp-up phase. In this budget projection, ramp-up will continue into the 4<sup>th</sup> year. The Fiscal Year '10 budget of \$11 million will exceed the FY '09 budget by \$1.2 million.

Outlook for FY '10 Academic spending will be nearly on plan. We anticipate 2 rather than 3 distinguished teaching internships. Once again, we account for \$1 million in new faculty start-up funds that were not in the original plan.

Outlook for FY '10 Research spending will also be nearly on plan. Half-time faculty appointments have been reduced from 9 to 3, using the same rationale as above, to provide funding for continuation of the matching grants fund and to provide funding for research center seed money.

Outlook for FY '10 Outreach and Services and for Administration funding is nearly on plan, with only slight reduction in consulting budget to make up for increases in support budget.

## 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	\$ -
<b>Total</b>	<b>\$ 9,290,000</b>	<b>\$ 9,290,000</b>	<b>\$ 5,000,000</b>	<b>\$ 5,000,000</b>	<b>\$ 18,580,000</b>	<b>\$ 10,000,000</b>

### 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
<b>Total</b>	<b>\$ 5,000,000</b>	<b>\$ 5,000,000</b>	<b>\$ 5,000,000</b>	<b>\$ 5,000,000</b>	<b>\$ 10,000,000</b>	<b>\$ 5,000,000</b>

### 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 # Schlumberger +	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -
<b>Total</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>

Notes:

- \* In June 2006, EnCana also donated \$2 million - matched to \$4 million - to UW for new petroleum engineering research laboratories.
- \*\* We have received verbal notice about a gift of this size from ConocoPhillips, but it has not been finalized.
- \*\*\* 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.