

Iowa Power Fund Board - Due Diligence Committee (DDC)
Meeting Minutes
October 13, 2009
3:00 P.M.
Conference Call

Dial in 866-685-1580
Code 5157252063#

Call to Order

Roya Stanley, Director of the Office of Energy Independence, called the meeting to order at 3:11pm.

Roll Call

Member	Present	Absent
Franklin Codel	Conf. Call	
Ted Crosbie	Conf. Call	
Vern Gebhart	Conf. Call	
Patricia Higby	Conf. Call	
William (Curt) Hunter	Conf. Call	
Kevin Nordmeyer		X
Tom Wind	Conf. Call	
Roya Stanley	X	

Also in attendance from the Office of Energy Independence: Brian Crowe, Bruce Greiner, Mary Lewis and Tena Malone.

Full-Application Review

09-08-1228 Harnessing Energy Flows in the Biosphere
Iowa State University, Ames, IA
Requesting \$2,000,000 Match \$22,000,000

Recusal – Higby, Hunter & Nordmeyer

A correlation between National Science Foundation (NSF) Research Awards to the States and their Gross Domestic Products shows a deficiency in R & D funds supporting Iowa industry. Experimental Program to Stimulate Competitive Research (EPSCoR) is a congressionally mandated program to build academic research capacity in states that receive relatively smaller shares of federal contracts and grants. Within the program there are several funding opportunities but the current focus is on Track-1 of the Research Infrastructure Improvement Program (RII *Track-1*). This opportunity is available in five year renewable grants, \$20 million, and requires 20% non-federal cost-share.

Our vision for the Iowa NSF EPSCoR project is to build research capacity within the state to support a transition in energy supply from mining subsurface (fossil) energy stores to harnessing renewable energy flows at or near the earth's surface. Inherent to this new energy paradigm is large-scale interventions in the biosphere, which requires a fundamental rethinking of the interactions between human societies and the natural environment.

Our approach encompasses partnering among the three Regent universities which also includes all community and private colleges in Iowa. This includes both a scientific program and a broader impacts program. By taking a systems perspective in renewable energy and invest in faculty and equipment in topics that are important to Iowa's renewable energy future. The focus of resources will be on junior faculty with senior faculty serving as mentors and value collaborations among external partners.

The model for the project will be a three branch system of teams and/or committees. The general work will be to regularly communicate with Iowa companies on the progress of the projects, assisting those companies with workforce issues (both near and long term), asking industry experts to help evaluate the

effectiveness of the research, and exploring collaborative projects in renewable energy with Iowa companies over the course of the project.

The broader impacts of the program are: diversity-increasing participation among underrepresented groups at the Regent universities, both as faculty and students; workforce development-preparing the future workforce for the emerging renewable energy economy through Science, Technology, Engineering, and Mathematics (STEM) education; and external engagement-facilitating communication among our distributed ESPSCoR team members as well as with our stakeholders.

Q: Is this going to end up creating an entire new department with new disciplines or is this augmenting existing programs?

A: Augmenting existing programs with faculty. It's also emphasizing the whole area of renewable energy which is bringing faculty into it that hasn't focused on it before and enhancing our capabilities. It's exciting for all of us, the synergy between investigators at all 3 institutions. Focusing and redirecting in many perspectives. It's creating a multitude of ideas for other grant proposals that are more specifically focused, creating a focused area in Iowa in renewable energy and sustainability. It will be adding to and supporting what's missing.

C: The industry has been trying to convince the Regents to collaborate. This is a great way to leverage state dollars. Monsanto will write a letter of support for the project if it goes to the Power Fund Board.

Q: How much work have you done in engaging this as a 3/2 program? How much work have you done on engaging the agencies that you would use in this project and do you think you have firm commitments in hand or just where are you with that?

A: We do have collaboration with several institutions such as University of Arkansas, Texas A & M and University of Puerto Rico.

Q: What we would normally look at with an agreement with you, or what the Board has done in the past, would provide for the potential resulting from intellectual property, in affect a success payment back to the fund to be reinvested. Is that what's considered here in this proposal?

A: We haven't proposed anything in that respect. I think there is great potential for the EPSCoR program, it encourages great success and great potential in creating IP. At a minimum I think there will be IP opportunities certainly to be licensed. There is a myriad of Iowa companies that should be well positioned to have conversations about licensing. It's something that could most definitely be looked at.

C: This is really an investment in research capacity building in this state, not as much as in a specific research project. I think it will be a little less clear how to exactly figure what an IP negotiation would look like in a specific contract.

C: I appreciate that and I think that the Due Diligence Committee needed to be aware of that and if they agree and vote in favor of this, then recognize that the Board may ask about that and ultimately in negotiations there would need to be some clarification of that issue.

C: I'm comfortable with this being capacity building. I'm not really worried about IP on this project from a states perspective.

Q: Is there any sense of how NSF deals with IP in granted funds? Is there a specific direction of how NSF deals with the collection of IP?

A: Federal funding doesn't result in the federal government having any access to IP. We have an obligation to do our best to turn that IP into something that's effectively useful to the public sector but the government doesn't retain any rights.

Q: (Page 9) Regarding the energy platform: how do you arrive at these specific things? Do you know everything you're going to work on in the next 5 years or are you going to be seeking collaboration with industry and asking them what to work on? Is it all figured out?

A: We asked for the submission of white papers and after receiving those, processed those issues from the industry and developed a workforce development plan. There is a lot of talent at the regent universities in the areas with energy and developing specific areas and potential interaction that might be very good. These ideas were chosen on the collaboration of the faculties from the three schools. We do want to have the interaction with industry to help us.

Q: It seems like you have just asked the university faculty for your ideas and you need to take that other step and go back to the Industry for ideas. I hope that's included in this link.

A: A lot of our impact areas is external engagement, we will have up to a couple of conferences a year with companies and researches to share their ideas to help us move in a more competitive direction. What we hope to do out of all of this is strengthen our ties with industry and being more intuned to the industry and this is the purpose for this particular grant is how we build partnerships beyond what

normally we have worked with today or in the past. The bottom line is how much Iowa will benefit from this if we're successful.

Q: Iowa spends 100 million dollars a year on energy efficiency plus we have the Iowa Energy Center in Ankeny that does a lot of work. What is the assurance that there are not duplicated efforts?

A: Absolutely no duplication; Kevin Nordmeyer is the platform leader for energy efficiency.

Q: (Page 25) On budgeting, in regards to listing a whole bunch of equipment: Is that the specific fund that we can identify as the board members and is this what the money is going for when you're doing all these various things? Would that be NSF money or Power Fund money?

A: If you look at slide 11 for the breakdown of how the money will be used across the board, the final budget could be shown to the Power Fund Board as to what money went towards equipment from the NSF and what money went towards equipment from the Power Fund.

Q: When you go to this higher power for the 20 million dollars how are they going to judge this lack of specificity towards other grant request they may have? Traditionally grant applications have to have specific goals & milestones.

A: This EPSCoR funding opportunity isn't structured as such.

Q: It appears part of this is building a bureaucracy so we can do things that maybe other states are already doing. Is there something special that other states just inherently have that Iowa does not or did they already have the bureaucratic system in place? How will you measure capacity building?

A: We're not trying to build bureaucracy—we are trying to build collaboration. There will be a formal annual evaluation process and projects will appear and disappear as they are successful or unsuccessful. NSF has invited this application because they believe our science & research is so strong. They would like to see us implement this and then look at Iowa and see what we look like in a large number of categories going forward. In some ways we have many programs in mind but in other ways we are really looking at broad outcomes for their EPSCoR funding at a National competitive model.

Q: How do you intend to measure your effectiveness at building capacity? What is your proposed plan?

C: If you look at slide 3 of the presentation, the graph reflects low NSF Funds below 50 million a year for Iowa but by national recognition for faculty this will increase the NSF Funding and we can attain that goal. Economic development will also measure effectiveness.

Vote:

Yes – Crosbie, Wind, Codel, and Gebhart

Yes, if –

No, but –

No –

Other Business

None

Next Meeting

The next Due Diligence Committee Meeting will be held October 28, 2009 at the Iowa Department of Economic Development Conference Room starting at 8:00am.

Adjournment

The meeting is adjourned at 4:03pm.

Respectfully Submitted,
Mary Lewis, Recorder
Tena Malone, Recorder