

**Iowa Energy Center Board
Meeting Minutes
February 13, 2018
9:00 a.m.**

Iowa Energy Center Board Members Present:

Robert Berntsen	David Cwiertney	Debi Durham	Geri Huser
Jennifer Johnson	Valerie Newhouse	Dan Nickey	Rick Olesen
Joel Schmidt	Timothy Whipple		

Iowa Economic Development Authority Staff Present:

Brian Selinger	Adrienne Ricehill	Terry Roberson	Jennifer Klein
Amber Buckingham	Ryan Young	Tim Waddell	
Stephanie Weisenbach	Shelly Peterson	Leslie Leager	

Others Present:

Representative Charles Isenhart	Julie Charlsen, ISU
Reggie Goodale, IAEC	Keith Kutz, Private Citizen
Brenda Biddle, IUB	

Welcome and Introductions

Roll Call

Brian Selinger called the meeting of the Iowa Energy Center Board to order at 9:01 am.

A quorum of the Board was established with the following Board members present: Robert Berntsen, David Cwiertney Debi Durham, Geri Huser, Jennifer Johnson, Valerie Newhouse, Dan Nickey, Rick Olesen, Joel Schmidt, and Timothy Whipple.

Approval of October 31, 2017 Meeting Minutes

Geri Huser: Moved that the Board approve October 31, 2017 meetings minutes.

Timothy Whipple: Seconded the motion.

Yes: 10 No: 0 Present: 0

Motion Passed

Public Comment Period

Representative Isenhardt presented to the Board a handout (**Attachment A**) summarizing the work of the U.S. Climate Alliance asking for their involvement in this coalition. Representative Isenhardt also encouraged the Board to take an active role and weigh-in on the Bill brought before the House proposing changes to energy efficiency and renewable energy statutes.

Nomination of Board Chair and Co-Chair

Nomination of Board Chair

Rick Olsen nominated Timothy Whipple to serve as Board Chair.
Jennifer Johnson 2nd the motion.

Yes: 9 No: 0 Present: 1

Motion Passed

Nomination of Co-Chair

Debi Durham nominated Jennifer Johnson to serve as Co-Chair.
Timothy Whipple 2nd the motion.

Yes: 9 No: 0 Present: 1

Motion Passed

Iowa Energy Center Board Presentation

Grant Portfolio Presentation

Presentation provided (**Attachment B**)

Summary of IEC Board Questions/Comments & IEDA Staff Response

Scholarships

- What documentation does IEDA have for the awarded Scholarships?
 - IEDA received the name of the student, college attending, and the award amount from IEC.

- IEDA will obtain copies of the award letters from students to confirm award amounts and terms.
- Will there be expirations to these commitments?
 - IEDA will review the award letters and the historical IEC rules to determine the end date of these commitments.
 - Commitment letters and new agreements will be developed and brought before the Board for their review.

Pledged Commitments

- Will there be expirations to these commitments?
 - Yes, there will be expirations placed upon these commitments. This will be discussed with the Board before determining the end dates.
- What documentation does IEDA have for the Pledged Commitments?
 - IEDA has only received one commitment letter that states that the grantee has received their DOE funding.
- Will recipients provide documentation from DOE that they have received their funding?
 - Yes, the grantees would have to provide IEDA a copy of their DOE award letter before a contract will be executed.
- Are these matching grants?
 - Yes.
- Are there DOE deadlines associated with these pledged commitments? The pledged commitment should reflect the when the grantee submits the proposal to DOE and If the grantee is not awarded funding from DOE then the commitment should be rescinded.
 - IEDA will gather information regarding these commitments and DOE deadlines. This information will be brought before the Board for their review.

Requests Made by Board Members

- Board member requested that IEDA inform grantees that awarded grants are to be used specifically for the identified DOE project and will not be allowed for other uses.
- Board member requested that before limitations are placed on the pledged commitments additional information needs to be provided (amounts, timelines, etc.) by IEDA.

Midterm/Final Reports

- Will the Board receive an executive summary of the reports that have been submitted?

- A summary of these reports will be provided to the Board for their review.
- How many grantees have provided midterm/final reports?
 - IEDA has not received reports since the transfer of IEC in October 2017. There has not been a mechanism in place for the grantees to submit reports. IEDA is completing the process of creating accounts in lowagrants that will allow grantees to submit their reports and claims.
- The grantees had submitted their reports through ISU's online reporting system. Since this reporting system is no longer in use grantees may be unaware of how to submit reports.
 - Once accounts have been created in lowagrants grantees will be notified that they have been granted access and that they may upload reports and claims. Training will be provided but since most of the grantees have previously used lowagrants the transition should run smoothly.

lowagrants

- Is lowagrants a searchable database? Could it be converted to allow this function?
 - No. lowagrants is not a publicly searchable platform. IEDA is currently working with Dulles to update the platform that will allow grantees to search for their grants within the system.

IEC Grants Pre-application Form

Debi Durham nominated to approve the IEC Pre-application form for distribution
 Dan Nickey 2nd the motion

Yes: 10 No: 0 Present: 0
Motion Passed

Summary of IEC Board Questions/Comments & IEDA Staff Response

- What are the next steps?
 - IEDA will work with the communications department to publicize the pre-application, post the application on the IEC website, and provide a link for the Board members to forward to interested parties.
- Will the grants have a rolling deadline?
 - Yes. Pre-applications will be reviewed for approval at each quarterly board meeting.

- What happens after the pre-application? After Board approval, will interested parties then be required to submit a full application?
 - Yes.
- What are the details of the full application? Universities will be interested in knowing the timeline between the pre-application and full application.
 - IEDA will prepare supporting documents detailing: timelines, guidance, next steps before releasing the pre-application.
- What is the process that IEDA will use to vet incoming applications? Where will expertise be sought from to vet the applications appropriately to make recommendations?
 - If needed, IEDA can assemble expert panels who can vet the incoming applications. These individuals can be from outside the state as well.

Requests Made by Board Members

- Board member requested IEDA to send the pre-application to all three University Sponsored Programs.
- Board member requested IEDA to provide reports tracking grant applications (selected pillars, geographics, demographics, etc.) during Board meetings.
- Board member requested IEDA to also provide the tracking reports to committees and Legislators.

Staff Recommendations on Grant Modification Request

Renewable Energy Course

Awarded: 49,723

Unspent Balance: 9,544.18

Start Date: 3/1/2017

End Date: 2/15/2018

Project Goals:

- To develop a course to train undergraduate and graduate students in fundamentals of renewable energy.

Modification Request:

- University of Iowa Professor Andrew Kusiak (Principal Investigator / PI) is requesting a 6 month, no cost extension.

Previous Modification Requests:

- No prior modifications have been requested.

Additional Information from Grant Recipient:

- The reason for extension is that a student with the background needed to engage in the project was not available. The originally proposed budget for the project anticipated training a student. However, it was reduced to about a half of the amount requested in the final weeks of operations of the Iowa Energy Center. There was no time to renegotiate the budget.

Staff Recommendations:

- Approve grant modification with new end date of 7/31/2018.

Summary of IEC Board Questions / Comments & IEDA Staff Response

- What is the purpose of the Grant?
 - The grantee is creating a course to train students in the fundamentals of renewable energy.
- Will the graduate students be teaching this course, and will the course be continued and added to the curriculum?
 - Yes
- Will the Board receive information regarding attendance in the final report?
 - Yes
- The original grant amount was for \$100,00 and it was reduced to \$49,000?
 - No, the original grant amount was for \$49,000. The grant monies to be used for the graduate student's tuition was reduced by half.
- Grant monies are paying for graduate student's tuition?
 - Yes, grant monies are used to support tuition and/or stipend for the graduate student.

Board Chair made motion to accept staff recommendation to grant modification with new end date of 7/31/2018.

Yes: 10 No: 0 Present: 0
Motion Passed

Geri Huser: Is the Board monitoring the questions that are being typed in Skype during the meeting?

- IEDA technology team will monitor questions.

Geri Huser typed on Skype: What is the plan for conferences and other events that the IEC formerly participated in or hosted?

- IEDA will bring this question before the Board at the next quarterly meeting.

Alternate Energy Revolving Loan Program (AERLP) Presentation

Presentation provided (Attachment B)

Summary of IEC Board Questions/Comments & IEDA Staff Response

- Will the banks continue servicing these loans? Or will IEDA begin servicing these loans?
 - The banks will continue to service the existing loans. Depending on the volume of new loans it may be an option for IEDA to service these loans in the future.
- Will IEDA provide historical data (types of loans, amounts, etc.) to the Board to assist in the policy discussion? What types of loans are in the loan portfolio? Are there a lot of small wind or solar loans?
 - Yes, a report will be submitted to the Board for their review. There were several projects under the \$100,000 and \$50,000. Several projects were the installation of solar (farms, individual residences, and multi-family residences), small wind, anaerobic digester, and energy storage.
- Are there outcomes that can be compiled? Is there any data that can be provided? Types of projects-carbon reduction, transformational projects?
 - IEDA will add this data to the summary report that will be submitted to the Board.
- What is the best way to learn about this loan program? Is there a website?
 - Some background information is provided on IEC website. IEDA will compile data from the annual reports and submit a report to the Board.
- Did the existing loans receive prior approval from the Board?
 - IEDA has not seen any evidence that Board members were involved in reviewing or approving the existing loans.

Requests Made by Board Members

- Board Chair proposed that the Board first complete actions regarding the IEC Grant Program and Administrative Rules before starting to work on the Loan Program. The loans can be continued to be serviced by the banks and the Board can conduct long-term planning for the Loans later in the year.

Financials – Audit

Presentation provided (Attachment C)

Summary of IEC Board Questions/Comments & IEDA Staff Response

- Would there be an additional FTE needed for the IEC grant and loan programs?
 - IEDA has a staff member in place who will conduct both loan and grant program work activities.
- What is the scope of the audit?
 - The State Auditor is reviewing the past couple of years of administrative costs and will be taking a close look at the open grants and loans. Specifically, the loan allowance of the bad debt will be reviewed. IEDA will need this information when IEDA submits information for the State's CAFR

Administrative & Program Rules

Presentation provided (Attachment D)

- Administrative rules will closely follow what is listed in the Code and the structure of the IEDA Board.
- Draft administrative and program rules will be presented to the board during the May quarterly meeting.

Requests Made by Board Members

- Board Chair proposed that Sub-committees be created for the grant and loan programs. These committees will review new grants/loans and make recommendations to the Board.
- Board member requested to hold a special session to approve the proposed administrative Rules.
 - IEDA will make the suggested changes and schedule a special meeting to adopt the administrative rules.

Other Business

- IEDA IT has created IEDA dedicated email accounts for board business.
 - If needed, IEDA IT is available to assist board members establish their accounts.
- IEDA has been requested to present during the Economic Development Sub-committee Meeting on February 21, 2018 at 10am. Board members are welcome to attend, IEDA will send a meeting invite for Board members to save to their calendars.
- IEDA would like to present informational sessions to the Board regarding energy storage and biomass.
- IEDA will provide an update of the Iowa Energy Plan to the Board detailing past actions and upcoming activities.

Adjournment

There being no further business, the Iowa Energy Center Board adjourned the meeting at 10:23 a.m.

Adrienne Ricehill
IEC Board Administrator

Attachment A

UNITED STATES CLIMATE ALLIANCE

9 February 2018

The Honorable Charles Isenhart
State Representative
Iowa House of Representatives
Statehouse Des Moines, Iowa 50319

Dear Representative Isenhart,

Thank you for your recent correspondence regarding the opportunity to consult with the Iowa Innovation Council, Iowa Innovation Corporation, Economic Development Authority and Iowa Energy Center, as well as other stakeholders, regarding Iowa's potential participation in the U.S. Climate Alliance. I would be glad to accept your kind invitation to visit Iowa to share the work of the Alliance and explore how cooperation with Alliance States can help Iowa achieve its clean energy and climate priorities. I also would like to extend my personal thanks for your leadership and dedication to mobilizing support in the state for ambitious climate action.

As I read the Iowa Energy Plan, it is clear that many of the state's energy priorities align with the priorities of the Alliance - a focus on innovation, workforce development, modernizing our electrical grids and promoting the expansion of electric vehicles. Furthermore, Iowa's long history of leadership in clean energy, in particular the successful deployment of wind power at scale, makes its membership in the U.S. Climate Alliance both logical and valuable.

As you know, the U.S. Climate Alliance is a bipartisan coalition of states committed to continuing American leadership in the essential mission of combatting global climate change. The Alliance consists of 16 American states and territories represented by both Democratic and Republican governors who have committed their jurisdictions to meeting or exceeding their share of the carbon pollution reduction goals put forward by the United States in the historic 2015 Paris Agreement. These states are also committed to working together to accelerate emissions reductions, capture the economic opportunities in clean energy, and to share the stories of their states' successes with the American and global community.

The Honorable Charles Isenhart

09 February 2018

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The member states and territories of the Alliance together make up over one-third of the population of the United States, and their economies collectively comprise over \$7.4 trillion - equal in economic terms to the third largest country in the world. In the last decade or so, the Alliance states' have on average experienced faster economic growth than the rest of the U.S. economy while also reducing emissions at a faster pace. Their climate and clean energy policies have helped create 1.5 million clean energy jobs -more than half the U.S. total. The Alliance State have demonstrated that the solutions to today's climate and energy challenges can not only help stave off the worst impacts of climate change, but help grow economies and create American jobs.

The State of Iowa, which has demonstrated its own success expanding clean energy, has much to offer other states, and the world, in its participation in the group, as well as a chance to take advantage of new opportunities in technology deployment and emissions reductions. In becoming a member of the U.S. Climate Alliance, Iowa could join its fellow states in building a more prosperous, sustainable and secure clean energy future for the United States.

Thank you again for contacting me, and your continued interest in the U.S. Climate Alliance. I look forward to an opportunity to speak with you and your colleagues further.

Sincerely,

A handwritten signature in cursive script that reads "Julie Cerqueira".

Julie Cerqueira

U.S. Climate Alliance Executive Director



House of Representatives

State of Iowa

Eighty-Seventh General Assembly

STATEHOUSE

Des Moines, Iowa 50319

September 1, 2017

World Day of Prayer for the Care of Creation

Governor Kim Reynolds
Iowa State Capitol
1007 E. Grand Avenue
Des Moines, IA 50319

Dear Governor Reynolds:

We urge you to take executive action to join the State of Iowa to the United States Climate Alliance.

As you know, the Climate Alliance is an association of states committed to carrying out the intent of the Paris Agreement. The Paris Agreement builds upon the United Nations Framework Convention on Climate Change and recruits governments to the common cause of ambitiously combatting climate change by limiting global temperature increases, by dealing with climate impacts and by adapting to its effects.

We believe that Iowa's participation in the Climate Alliance is consistent with the recently-approved Iowa Energy Plan, which aspires to "collaborate locally, grow sustainably and lead nationally."

You capably chaired the development of the Energy Plan and asserted in your message that "the time is now to continue to build on Iowa's successes by charting a sustainable and predictable course for tomorrow."

This past legislative session, the General Assembly and Governor Branstad approved legislation moving the Iowa Energy Center to the Iowa Economic Development Authority, strengthening the capacity of state government to implement the Energy Plan and provide that national leadership.

The Economic Development Authority's City Energy Management Program works with participating communities to create energy action plans, establish the business case to invest in energy efficiency and develop a steady source of funding for energy efficiency projects.

The Iowa Utilities Board and Office of Consumer Advocate have maintained an ongoing Energy Efficiency Collaborative, and the Board has opened an inquiry into the potential for widespread use of distributed energy resources in Iowa.

Iowa's public universities, led by Dr. Robert Brown, is completing a five-year project funded by the National Science Foundation to build Iowa's research capacity in sustainable energy systems. The project supported studies in bioenergy, wind energy, energy utilization and energy policy, including partnerships with the state's community colleges, private colleges, school districts, government agencies and industries.

Dr. Brown also leads Iowa State University's Bioeconomy Institute, which supports Iowa agriculture in the state's quest for sustainable sources of fuel, energy, chemicals, and material, such as biochar. Iowa's researchers are part of a "New Carbon Economy" consortium launched by the Center for Carbon Removal, a partnership of research institutions. The goal of the initiative is to remove carbon dioxide from the atmosphere and convert it into valuable products and services.

The Iowa Department of Natural Resources has successfully led an interagency, public-private stakeholder group to coordinate development of efforts to reduce carbon emissions in Iowa, and regionally, in accordance with the Clean Power Plan. That stakeholder group could be charged with continuing their work and lead Iowa's participation in the multi-state Climate Alliance.

In your letter introducing the Iowa Energy Plan, you concluded that "the Governor's office looks forward to working with Iowa's stakeholders on strategy implementation."

As elected officials representing legislative districts where we can convene constituents to "collaborate locally," we are eager to partner with you to make the Iowa Energy Plan a reality and help Iowa do our part to achieve the goals of the Paris Agreement.

We can do this!

We respectfully suggest that our collective intent can be expressed and Iowa's rightful place among states committed to climate action can be claimed by your Executive Order committing Iowa to the United States Climate Alliance.

Thank you for your attention and consideration. Best wishes for your tenure as our governor, working with the General Assembly to pursue the public interest and achieve the common good.

Sincerely,

A handwritten signature in black ink, appearing to read "Chuck Isenhardt". The signature is written in a cursive, flowing style.

State Representative Chuck Isenhardt
Ranking member, Environmental Protection Committee

State Representative Sharon Steckman
Environmental Protection Committee
Ranking member, Education Committee

State Representative Cindy Winckler
Environmental Protection Committee
Ranking member, Education Appropriations Subcommittee

State Representative Marti Anderson
Environmental Protection Committee
Ranking member, Public Safety Committee

State Representative Vicki Lensing
Environmental Protection Committee

State Representative Ako Abdul-Samad
Environmental Protection Committee

Representative Bob Kressig
Environmental Protection Committee

State Representative Monica Kurth
Environmental Protection Committee
State Representative Mark Smith
Minority Leader

Representative Bruce Bearinger
Assistant Minority Leader
Member, Natural Resources Committee, Economic Growth Committee and Agriculture Committee

State Representative Liz Bennett
Assistant minority leader
Member, Economic Growth Committee and Governor's STEM Advisory Council

State Representative Brian Meyer
Assistant minority leader Member, Commerce Committee and Local Government Committee

State Representative John Forbes
Ranking member, Transportation Committee

State Representative Todd Prichard
Ranking member, Agriculture Committee

State Representative Jo Oldson
Ranking member, Commerce Committee

State Representative David Jacoby
Ranking member, Ways and Means Committee

State Representative Art Staed
Ranking member, Local Government Committee

State Representative Mary Mascher
Ranking member, State Government Committee

State Representative Mary Gaskill
Ranking member, Economic Growth Committee

State Representative Jerry Kearns
Ranking member, Veterans Affairs Committee

State Representative Beth Wessel-Kroeschell
Ranking member, Human Resources Committee

State Representative Lisa Heddens
Ranking member, Health and Human Resources Appropriations Subcommittee

State Representative Abby Finkenauer
Ranking member, Government Oversight Committee

State Representative Timi Brown-Powers
Member, Iowa Commission on Interstate Cooperation and Governmental Public Health Advisory Council

State Representative Wes Breckenridge
Member, Natural Resources Committee and Public Safety Committee

State Representative Amy Nielsen
Member, Transportation, Infrastructure, and Capitals Appropriations Subcommittee

State Representative Charlie McConkey
Member, Commerce Committee and Economic Growth Committee

State Representative Tim Kacena
Member, Public Safety Committee

State Representative Ras Smith
Member, Transportation Committee and Transportation, Infrastructure and Capitals appropriations Subcommittee

Attachment B



Iowa Energy Center Board Meeting

February 13, 2018

IEC Grant Program Updates

- Grant Updates
- Grant Program Vision
- Next Steps
- Grant Modification Request

Grant Updates

- **Grant Status**
 - Current Ledger/Status
- **Additional/Missing Data**
- **Additional Topics**
 - Scholarships
 - Endorsed Grants
 - Midterm/Final Reports
 - Contracts
 - IowaGrants

Grant Status

- 17 grants with end dates in 2018 and beyond
- Six grants closed post transfer to IEDA

Title	Awarded	Expenses to Date	Awarded Unspent Balance	Start Date	End Date	Extension	Unfunded Commitments	Status
Municipal and Hydrocarbon Waste Streams - Alt Source for Fuels	153,070	106,491.78	46,578.22	Prior Years	6/30/2017			Closed
Organizing the 2017 North American Wind Energy Academy Symposium at ISU	14,916	5,115.34	9,800.66	1/15/2017	10/30/2017			Closed
Renewable Energy Course	49,723	40,178.82	9,544.18	2/16/2017	2/15/2018			Active
My Family's Wind Farm	20,273	7,443.00	12,830.00	3/1/2017	2/28/2018			Active
Energize Northeast Iowa Education	37,600	-	37,600.00	3/1/2017	2/28/2018	6/30/2018		Active
Building Materials for Energy Efficiency: Adaptable Educational Modules	64,990	16,026.78	48,963.22	3/1/2017	2/28/2019			Active
Bridging Energy Science Education and Careers with Innovative Technologies	67,778	24,420.27	43,357.73	3/1/2017	2/28/2019			Active
Development of Agricultural-Based Phase Change Materials for Building Applications	142,136	94,202.99	47,933.01	7/25/2016	1/25/2018			Closed
Developing a Landscape of Building Energy Use and Emissions in the City of Des Moines, IA	98,557	84,366.83	14,190.17	7/15/2016	12/15/2017			Closed
Resilience Enhancement of Electric Power Systems and Associated Infrastructures	124,508	121,854.14	2,653.86	10/1/2016	9/30/2017			Closed
Hydroxycinnamic Acids from Lignin as Platform Molecules for Productions of Bio based Materials	149,211	70,134.49	79,076.51	1/1/2017	12/31/2017	6/30/2018		Active
Forced and Natural Turbulence Allowing Studies of Turbulent anisotropic Conditions (FaNTASTIC)	78,106	55,223.27	22,882.73	11/1/2016	12/31/2017			Closed
Deoxygenation of Lignin-Derived Species to Aromatics and Olefins	94,598	49,812.36	44,785.64	1/1/2017	12/31/2017	6/30/2018		Active
In-Field Building Material Thermal Conductivity and R-Value Measurement	80,000	34,969.59	45,030.41	2/15/2017	2/14/2018			Active
Measurement-Based Hierarchical Framework for Time-Varying Stochastic Load Modeling	30,071	5,711.92	24,359.08	7/1/2016	6/30/2018		30,819	Active
A Closed-Loop Distribution System Restoration Tool for Natural Disaster Recovery	10,000	1,932.48	8,067.52	7/1/2016	6/30/2018		10,000	Active
Cost Effective 6.5% Silicon Steel Laminate for Electric Machines	55,535		55,535.00	11/1/2016	9/30/2018		44,297	Active
Manufacturing of Advanced Alnico Magnets for Energy Efficient Traction Drive Motors and Generators	65,000	16,306.50	48,693.50	2/1/2017	9/30/2018			Active
Flexible Service Contracting for Risk Management within Integrated Transmission and Distribution Systems	21,688	12,379.08	9,308.92	1/1/2017	12/31/2020		45,584	Active
Batteries: Strong High Li Ion Conductivity, Li-Impermeable Thin-Ribbon Glassy Solid Electrolytes	103,205	-	103,205.00	2/1/2017	1/31/2018	6/30/2020	184,045	Active
NNMI: Autothermal of Lignocellulose Wastes to Sugars and other Biobased Products	80,000	-	80,000.00	7/1/2017	12/31/2021		520,000	Active
Electrosynthesis with High Efficiency for Renewable and Scalable Liquid-Fuel Production	7,368	3,843.67	3,524.33	6/19/2017	6/18/2018		7,369	Active
Corporation for National and Community Service	27,566		27,566.00	9/28/2017	9/30/2018			Active
Totals	1,575,899		825,485.69				842,114	
					Total Remaining and Unfunded Commitments		1,667,600	
		750,413.31						

Missing Data

- Received missing project data for LG -13-05 FY 16 – Kelkar
- Received missing contracts for:
 - EG-17-007 – Building Materials for Energy Efficiency: Adaptable Educations Modules
 - EG-17-009 – Bridging Energy Science Education in Career with Innovative Tech
 - MG-17-002 – NNMI: Autothermal of Lignocellulose Wastes to Sugars & Bio Products
 - MG-17-008 – Electrosynthesis with High Efficiency for Renewable & Scalable Fuel
 - OG-16-018 – Multi-Scale Dynamic Design
 - OG-16-027 – Hydroxycinnamic Acids from Lignin

Additional Topics

- **Scholarships**

- Part of the Iowa State Science and Technology Fair
 - Youth and Energy Scholarships for exceptional energy-related projects exhibited at the fair
 - Additional \$500 to students who attend an Iowa college

IEC Education Scholarships - FINAL

Sci Fair Yr	High School of Recipient	Project Name	Area	Awarded	Eligible Bonus	HS Year	Year Enter College	College	Paid Out	Total Outstanding
2014	Rivermont Collegiate High School	An Investigation into the Improvement of Switchgrass Biofuel Production	renewable energy	2,500	500	Freshman	2017	TBD	-	3,000
2015	Rivermont Collegiate High School	An Investigation into the Improvement of Switchgrass Biofuel Production: Phase II	renewable energy	5,000	500	Sophomore	2017	TBD	-	5,500
2015	Van Buren Comm Jr-Sr High	The Effect of Sugar and Size on Microbial Fuel Cells	renewable energy	1,250	500	Freshman	2018	TBD	-	1,750
2015	West High School	Wind Turbine Efficiency	renewable energy	1,250	500	Freshman	2018	TBD	-	1,750
2016	Ames High School	Comparing Heating Value of Different Types of Fuels	energy efficiency	5,000	-	Freshman	2019	TBD	-	5,000
									Total to pay out	17,000

Additional Topics

- **DOE Leveraged Projects**

- Three projects

- Total of ~\$947,000 in leveraged funds

IEC Pledged Commitments - FINAL												
Grant Type	Proposal No.	PI	Organization	Title	Targeted Opportunity	Total Pledged Commitment	Anticipated Outlay FY17	Anticipated Outlay FY18	Anticipated Outlay FY19	Anticipated Outlay FY20	Anticipated Outlay FY21	
Matching Grant	MG-16-028	Zhou, Xiaohui	Iowa State University	All Digital Plug and Play Passive RFID Sensors for Energy Efficient Building Controls	DOE: DE-FOA-0001383	26,979	-	-	13,123	13,856		
Matching Grant	MG-17-001	Brown, Robert	Iowa State University	NNMI Rapid Proposal: Anaerobic Digestion Enterprise	DE-FOA-0001578	800,000	75,000	725,000	-	-		
Matching Grant	MG-17-009	Li, Wenzhen	Iowa State University	High Rate Ammonia Synthesis by Intermediate Temperature Solid-State Alkaline Electrolyzer	DOE ARPA-E; DE-FOA-0001563	120,000	-	40,000	40,000	40,000		
Totals						946,979	75,000	765,000	53,123	53,856		

Additional Topics

- **Midterm and Final reports**
- **Contracts**
 - Moving all transferred contracts through approval process
- **Iowa Grants (for existing contracts)**
 - Appropriations
 - Claims
 - Training

Grant Program Vision

- Example of pre-application
- Competitive grant program
- Must meet one of the seven focus areas outlined in the Iowa Energy Plan and produce tangible results
- Staff will vet and do background work on all grants (as well as provide a staff recommendation) before bringing them to the board for a vote

Next Steps

- Draft future program
- Draft administrative rules
- Draft program policies/procedures
- Draft application and internal documents
- Officially open grant application cycle/market program

- **Action Item: Grant Modification Request**

EG-17-02	Andrew Kusiak Department of Mechanical Engineering 4627 Seamans Center The University of Iowa Iowa City, Iowa 52242	University of Iowa	Renewable Energy Course	49,723	40,178.82	9,544,18	3/1/2017	2/15/2018	<ul style="list-style-type: none"> • Project Goals: To develop a course to train undergraduate and graduate students in fundamentals of renewable energy. • Modification Request: The reason for the extension is that a student with the background needed to engage in the project was not available. The originally proposed budget for the project anticipated training a student. However, it was reduced to about a half of the amount requested in the final weeks of operations of the Iowa Energy Center. There was no time to renegotiate the budget. • Previous Modification Requests: No prior modifications have been requested
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Alternate Energy Revolving Loan Program (AERLP)

Stephanie Weisenbach, Project Manager

Background

- Began in 1995
- Required by Iowa Code
- Encourages development of alternate energy production
- Any individual or organization can apply, with some limits on rural electric cooperatives and municipal utilities

Eligible Projects/ Facilities in Iowa Code

- Solar
- Wood-burning
- Wind turbine
- Small hydro
- Waste management
- Related improvements and facilities
 - Necessary land, buildings, or improvements at project site
 - Necessary transmission or distribution
- Resource recovery
- Refuse-derived fuel
- Agricultural crops or residues

Funding Specifics

- Facility is eligible for up to \$1 million
- Facilities developed by RECs and municipal utilities eligible for up to \$500,000 and limited to one loan every two years
- No interest on IEC loan funding

Recent Status

- Closed to applications as of spring 2017
- 333 open loans
- Data transfer into IEDA databases

Current Program Activities

- Redirecting monthly payments to IEDA's IEC loan account
- Receiving inquiries on when program will resume
- Analyzing program and project history
- Creating close-out process after final payments
- Seeking verification for projects' completion

AERLP Going Forward

- **Potential projects**
 - Recent program portfolio and common trends
 - Program history with certain eligible project types/ recipients that have received limited AERLP assistance
 - Look at other states and available programs
 - Consider newer potential projects and interest
- **Explore alignment with Iowa Energy Plan, impacts, barriers, needs, feasibility, financial and legal considerations**
- **IEC board to give direction, ideas and considerations**
 - What information from staff or stakeholders would be helpful?

Next Steps

- **Engage the IEC board for direction**
- **Draft program framework**
 - Scoring criteria
 - Application review schedule
 - Approach for technical assistance and review
 - Administrative policies and procedures
 - Develop application
 - Plan to promote program
- **Draft administrative rules**
- **Open and market program, estimate late summer 2018**

Attachment C

IEDA

Iowa Energy Center Financial Status Report

FY2018 (Cumulative Oct 1, 2017 thru January 31, 2018)

IEC - Main Account

Description	<u>Total Budget</u>	<u>Current Month</u>	<u>VTD Cumulative</u>
<u>REVENUE:</u>			
Balance Forward from Previous FY	0	0	0
FY18 Transfer from ISU	4,321,744	4,321,744	4,321,744
FY18 Transfer from IUB	4,233,903	4,233,903	4,233,903
T.O.S. Interest	35,000	0	0
Other Revenue			0
			0
			0
			0
			0
<u>TOTAL REVENUE:</u>	8,590,647	8,555,647	8,555,647
<u>EXPENSES:</u>			
Salary & Fringe	351,675	17,525	17,525
Travel (In-State & Out of State)	30,000	0	0
Supplies	12,325	0	0
Telephone/Communications	6,000	0	0
Rent	10,000	0	0
Advertising/Marketing	30,000	0	0
I.T.	40,000	0	0
Misc	20,000	0	0
ISU Grants	2,630,000		
Project Expenditures TBD dependent upon program development and finalization of rules	5,460,647	0	0
<u>TOTAL EXPENSES:</u>	8,590,647	17,525	17,525

IEDA

Iowa Energy Center Financial Status Report
 FY2018 (Cumulative Oct 1, 2017 thru January 31, 2018)

IEC - Main Account

FUNDING AVAILABLE:	Admin	ISU Projects	New Projects	Total
<u>Revenue:</u>				
Cash Balance Forward from Previous FY (ISU)	500,000	2,630,000	1,191,744	4,321,744
FY18 Allocation	0	0	4,233,903	4,233,903
T.O.S. Interest YTD	0	0	0	0
Other Revenue YTD	0	0	0	0
Deappropriations/ Transfers	0	0	0	0
Total Revenue YTD	500,000	2,630,000	5,425,647	8,555,647
<u>Expenses</u>				
Administration YTD	(17,525)	0	0	(17,525)
Project Payouts YTD	0	0	0	0
Total Expenses YTD	(17,525)	0	0	(17,525)
<u>Obligations:</u>				
Obligations C/F	0		0	2,630,000
Current Year Obligations	0		0	0
Current Year Rescissions	0		0	0
Current Year Payouts	0		0	0
Balance of Current Year Admin	482,475		0	482,475
Net Obligations YTD	482,475		0	3,112,475
Est. Balance Available	0	0	5,425,647	5,425,647

IEDA

Iowa Energy Center Financial Status Report
 FV2018 (Cumulative Oct 1, 2017 thru January 31, 2018)
 IEC - Alternative Energy Revolving Loan Program

Description	Total <u>Budget</u>	Current <u>Month</u>	YTD <u>Cumulative</u>
REVENUE:			
Balance Forward from Previous FY	0	0	0
FY18 Transfer from ISU	3,911,134	3,911,134	3,911,134
Principal Repayments	3,250,000	1,512,419	1,512,419
T.O.S. Interest	35,000	50	50
Other Revenue			0
			0
			0
TOTAL REVENUE:	7,196,134	5,423,603	5,423,603
EXPENSES:			
Salary & Fringe	10,000	0	0
Advertising/Marketing	7,500	0	0
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
Project expenditures TBD dependent upon program development and finalization of rules	7,178,634	0	0
TOTAL EXPENSES:	7,196,134	0	0

IEDA

Iowa Energy Center Financial Status Report
 FY2018 (Cumulative Oct 1, 2017 thru January 31, 2018)
 IEC - Alternative Energy Revolving Loan Program

FUNDING AVAILABLE:	Admin/Mktg	Projects	Notes Rec
Beginning Balance 10-1-17 (ISU)	0	0	12,852,838
Beginning Balance 10-1-17 (IEDA)	0	0	315,927
Transfer from ISU FY18	0	3,911,134	0
Principal Repayments YTD	0	1,512,419	(1,512,419)
T.O .S. Interest	50	0	0
Other Revenue			
Total	50	5,423,553	11,656,346
<hr/>			
Administration YTD	0		0
Project Payouts YTD	0		0
Total Expenses YTD	0		0
<hr/>			
Obligations:			
Obligations C/F	0	0	0
Current Year Obligations	0	0	0
Current Year Rescissions	0	0	0
Current Year Payouts	0	0	0
Balance of Current Year Admin	50	0	0
Current Year Write-Offs	0	0	0
Net Obligations YTD	50	0	0
<hr/>			
Est. Ending Balance YTD	0	5,423,553	11,656,346

Attachment D

261-403.1(15) Purpose. The Iowa energy center is established within the authority with the following purposes:

- a. To expand workforce and career opportunities for workers in the energy sector to ensure that the state is able to attract and train professionals to meet the state's future energy needs.
- b. To support technology-based development by encouraging public-private partnerships and innovative manufacturers to develop and bring to market new energy technologies.
- c. To support rural and underserved areas and vulnerable populations by creating opportunities for greater access to energy efficiency expertise, training, programs, and cyber security preparedness for small utilities.
- d. To support the expansion of natural gas infrastructure to rural and underserved areas of the state where the absence is a limiting factor to economic development.
- e. To promote and fund research, development, and commercialization of biomass technology to benefit the state economically and environmentally by further realizing the value-added attributes of biomass in the development of bioenergy, biofuels, and biochemicals.
- f. To encourage growth of the alternative fuel vehicle market, particularly for electric vehicles, and the infrastructure necessary to support the market.
- g. To support efforts to modernize the electric grid infrastructure of the state to support increased capacity and new technologies.

261-403.2(15) Definitions. As used in these rules, unless the context otherwise requires: "Authority" means the economic development authority created in Iowa Code section 15.105.

"Authority's Web site" means the information and related content found at <http://www.iowaeconomicdevelopment.com/> and may include content at affiliated sites whose content is integrated with that site, including the Iowa Energy Center Web site.

"Board" means the members of the Iowa Energy Center board appointed by the governor and in whom the powers of the Iowa Energy Center are vested pursuant to Iowa Code section 15.120.

"Center" means the Iowa Energy Center created pursuant to Iowa Code section 15.120. "Committee" means a committee established by the board.

"Director" means the director of the authority or the director's designee.

261-403.3(15) Iowa Energy Center board. 403.3(1) Composition.

a. The power to oversee, approve, and provide direction concerning the programs established by the center shall be vested in a governing board consisting of the following members appointed by the governor:

- (1) One member representing Iowa state university of science and technology, in consultation with the president of that university.
- (2) One member representing the university of Iowa, in consultation with the president of that university.
- (3) One member representing the university of northern Iowa, in consultation with the president of that university.
- (4) One member representing private colleges and universities within the state, in consultation with the Iowa association of independent colleges and universities.
- (5) One member representing community colleges, in consultation with the Iowa association of community college trustees.
- (6) One member representing the economic development authority, in consultation with the director of the economic development authority.
- (7) One member representing the state department of transportation, in consultation with the director of the department of transportation.
- (8) One member representing the office of consumer advocate, in consultation with the consumer advocate.
- (9) One member representing the utilities board, in consultation with the chair of the utilities board.
- (10) One member representing rural electric cooperatives, in consultation with the Iowa association of electric cooperatives.
- (11) One member representing municipal utilities, in consultation with the Iowa association of municipal utilities.
- (12) Two members representing investor-owned utilities, one representing gas utilities, and one representing electric utilities, in consultation with the Iowa utility association.

b. The terms of the members shall begin and end as provided in Iowa Code section 69.19 and any vacancy shall be filled by the governor as provided for in this subsection. The terms shall be for four years and shall be staggered as determined by the director.

403.3(3) Quorum and voting requirements. Nine or more voting members of the board constitute a quorum. The affirmative vote of a majority of the quorum is necessary for any action taken by the center's board members.

403.3(4) Board officers. Members of the board elect a chairperson and vice chairperson annually and may elect other officers as and when the members of the board determine.

403.3(5) Meetings.

a. Meetings of the center are held at the call of the chairperson or when two members of the board request a meeting. The board generally meets quarterly at the authority's offices located at 200 East Grand Avenue in Des Moines, Iowa. By notice of the regularly published meeting agendas, the board and its committees may hold regular or special meetings at other locations within the state. Meeting agendas are available on the authority's Web site.

b. Meetings of the board and any committee it may establish are conducted in accordance with the provisions of Iowa Code chapter 21. Any person may attend and observe the proceedings of the board and committee meetings except for those portions of the meetings conducted in closed session pursuant to Iowa Code section 21.5. Persons observing may use cameras or recording devices during the meeting so long as the use of such devices does not interfere with the proceedings. The chairperson may order any person to discontinue the use of such a device if the chairperson believes it is causing an interference with the proceedings. The chairperson may have any person excluded who fails to comply with such an order. The chairperson may also exclude any person generally causing a disruption of the proceedings.