1963 Bell Avenue, Suite 200 | Des Moines, Iowa 50315 USA | Phone: 515.348.6200 iowaeda.com



Iowa Energy Center Board Meeting Agenda Thursday, August 5, 2021 1:00 p.m.

IEDA, 1963 Bell Avenue, Suite 200 Des Moines, Iowa

Join Microsoft Teams Meeting

Or Dial 1.515.348.6300 Conference ID: 659 520 157#

The Iowa Energy Center Board may go into closed session pursuant to Iowa Code §21.5(1)a, §15.118, §22.7.3, §22.7.6 and §22.7.8 to review and discuss records IEDA is required to treat as confidential under Iowa law. This includes confidential business and financial information about applicants and industrial prospects with which the Authority is currently negotiating.

I. **Welcome & Introductions**

A. Roll Call

B. Approval of May 13, 2021 Meeting Minutes

Troy DeJoode **Betty Hessing**

Action

II. **Public Comment Period**

A public comment period will be held at this time and is limited to 10 minutes. If you are interested in offering a comment, please email the board administrator at Betty.Hessing@lowaEDA.com in advance of the meeting and provide your name and the topic of your comment.

III. **Fiscal Update** Terry Roberson

Information

IV. **Legislative Update** Kristin Hanks-Bents

Information

Information

Roll Call

Amber Buckingham

٧. **Competitive Grant Program**

A. Grant Program Update

B. Competitive Grant Program Funding Recommendations for Awards

1. 407769 – Driving Electric in Rural NE Iowa: An Analysis, Planning, Workforce, and Major Employer Partnership – Winneshiek Energy District

2. 406855 – Developing a Pilot-scale Business Model for Monetizing Carbon Capture on Solar Energy Farm -

3. 406335 – Advanced 3D optical sensing and peening technologies for crack mitigation in natural gas pipelines – *Iowa State University*

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- 4. 410656 From the Landfill to the Grid: Repurposing Used Batteries for Resilient Grid Storage -**Iowa State University**
- 5. 408866 Electrical Energy from Ethanol University of Iowa
- 6. 406441 Modeling Solar Radiation Potential and Urban Heat Utilizing Mobile Sensors and Topographic Data – University of Northern Iowa
- 7. 406939 Building Enclosure Council of Iowa Educational Programs - Building Enclosure Council of Iowa
- 8. 410833 Artificial Intelligence-Assisted Robotic Mapping of Underground Infrastructure - Iowa State University
- 9. 406042 Control and Coordination of Solar+Storage for Enhanced Resiliency - Iowa State University
- 10. 408802 GIS Tool to Plan Mitigation and Recovery of Gridlines Under Natural Hazards to Improve Resiliency – **Iowa State University**
- 11. 405974 Mobile Power for Rural Wastewater Treatment and Community Resilience - Baldridge Environmental Services, LLC
- 12. 406114 Micro-DERMS: DERMS for Real-time Monitoring & Control of Mobile-Microgrids and DER Distribution Grid – **Iowa State University**
- C. Competitive Grant Program Recommendations for Denial
- Roll Call
- 1. 405988 Chemically Recyclable carbon fiber composites for wind Turbine blades - Iowa State University
- 2. 410987 Treating Digestate from Municipal Digesters to Reduce Energy Consumption and GHG/Carbon Emissions – TPR Enterprises dba EcoEngineers
- 3. 406064 A Novel, Plasma-based, Adaptive Flow Control System For Improved Wind Turbine Efficiency – *Iowa State University*
- 4. 406343 Developing a Pilot Scale Technology to Reclaim Lead and Other Materials from Solar Photovoltaic Panels -**GKAT Reclamation**
- 408201 Energy-Dense, Low-Cost Batteries for Grid Modernization and Next Generation Electric Vehicles -*Iowa State University*
- 6. 406710 Training programs for currently incarcerated Iowans to develop a new and capable energy workforce – Iowa State University
- 7. 406445 Demonstration of Cost-Effective, Scalable Zero-Energy Residential Building Design for Iowa Climates – University of Northern Iowa
- 8. 406707 Iowa River Power Company Hydropower on *Iowa Rivers - Iowa River Power Company*

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- 9. 406020 Low-grade industrial waste heat energy harvesting – Legov Systems Group, LLC
- 10. 410096 Applications of Cybersecurity for the energy sector – Iowa State University
- 11. 410735 The Use of Biochar for Producing Next-Generation Electricity Harvesting Asphalt Pavement – Iowa State University
- 12. 410553 Laser Based Biomass Conversion of Corn Husk for Renewable Energy Applications – Iowa State University
- 13. 406032 Recycling of Used Li-Ion batteries to extract lithium, anode and cathode materials – Iowa State University
- 14. 405979 Iowa Energy Extension Program Iowa State University
- 15. 406950 Electrochemical Conversion and Storage of Wind Energy into Hydrogen Electrofuel – Iowa State University
- 16. 406176 Economic Sustainability of Clean Power Grid under Uncertainty – Iowa State University
- 17. 410588 Visium Bio-oil Hydrothermal Liquefaction Refinery - Visium LLC
- 18. 410592 Prudent Generation Planning towards Carbon Neutrality – Iowa State University
- 19. 406879 Iowa Agriculture Carbon Assessment for Emerging Carbon Markets - Iowa State University
- 20. 406728 Lawton Substation BESS Northwest Iowa Power Cooperative
- 21. 407051 Corn Belt Power Cooperative Trial Battery Project -Corn Belt Power Cooperative
- 22. 411285 Electric Grid Resiliency Study Iowa Association of Municipal Utilities
- 23. 406444 Iowa STEM Energy Teacher Externships University of Northern Iowa
- 24. 407000 High Strength Aluminum Carbon-Nanotube Composite for Grid Transmission Line – Iowa State University
- 25. 406013 Bio-based asphalt from corn stover Frontline Bioenergy

VI. Alternate Energy Revolving Loan Program (AERLP)

Stephanie Weisenbach A. 20-AEL-009 Amendment to Keaton Martin Reduction of Roll Call Loan Amount and Project Size

VII. **Energy Infrastructure Revolving Loan Program (EIRLP)**

A. Notice of Intended Action for amendments to 261 IAC Chapters 403 and 405 and proposing a new Chapter 406, Energy Infrastructure Revolving Loan Program

VIII. **Iowa Mobile Microgrid Development and Applications**

Anne Kimber – Electric Power Research Center at ISU Information

Lisa Connell

Roll Call

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IX. **Other Business**

- A. Energy Office Updates
- B. Special IEC Board Meeting is September 30, 2021
- C. Next Quarterly Board Meeting is November 18, 2021

X. Adjournment

Troy DeJoode

Troy DeJoode

Brian Selinger

Members: Troy DeJoode - Chair, Dan Nickey - Vice Chair, Stuart Anderson, Debi Durham, Geri Huser, Jennifer Johnson, Terry Kouba, Craig Just, Valerie Newhouse, Rick Olesen, Timothy Whipple, Gul Kremer-Okudan and Jenae Jenison

Please Note: The meeting will convene no earlier than stated above, but may begin later. Agenda items may be considered out of order at the discretion of the Chair for each meeting. If you require accommodations to participate in this public meeting, call 515-348-6197 to make your request. Please notify us at least 48 hours in advance.