

Minutes of the
RENEWABLE ENERGY COUNCIL (REC)

Thursday, June 22, 2023

1:00 pm (CT)

TEAMS Meeting Via Conference/Video Call

ONSITE Location: Bismarck Event Center, Room 103, 315 S. 5th Street, Bismarck, ND 58504

Members Present	Staff Present	Guests Present
Josh Teigen, TEAMS	Reice Haase, NDIC	Jason Laumb, EERC
Gerald Bachmeier	Brenna Jessen, NDIC	Dr. Michael Swanson, EERC
Al Christianson	Rich Garman, Commerce Dept.	Brian LaPlante, TEAMS
Terry Goerger	Joleen Leier, Commerce Dept.	John Schneider, TEAMS
Tony Grindberg		Marlo Anderson, TEAMS
Rodney Holth, TEAMS		

WELCOME & OPENING COMMENTS

Josh Teigen called the Renewable Energy Council (REC) meeting to order at 1:00 pm. Teigen welcomed the members and guests in the meeting room and on the TEAM video/audio platform. Teigen introduced himself and gave a brief history.

APPROVAL OF MINUTES

The minutes from the December 8, 2022, meeting was presented to the board. **It was moved by Grindberg and seconded by Christianson to approve the December 8, 2022, meeting minutes. The motion carried unanimously.**

RENEWABLE ENERGY PROGRAM LEGISLATIVE UPDATE

Reice Haase presented on legislative updates.

2023-2025 Appropriation

\$3M was appropriated to the Renewable Energy Council during the last legislative session. The Industrial Commission received two additional FTEs; one for grant management and one for administrative support.

House Bill 1014: Digitization and Grant Management Software

We were approved to purchase new meeting management software.

House Bill 1014: Carbon Capture Education

Appropriated up to \$100,000 from the Renewable, Oil and Gas, and Lignite Research funds and they directed you as a Council to make recommendations that would advance carbon capture education. We will discuss recommendations on how to go forward with this project at the fall meeting.

There was a question regarding the grade level of education. Haase stated that expectations in the budget bill are very broad. It states it is for education and marketing.

There was a question to clarify the amount taken out of the REC appropriation. Haase stated they will take \$350,000 out of the \$3M appropriation. Discussed amount to be taken from all programs since some programs are allotted more than the REC.

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PROJECT MANAGEMENT & FINANCIAL REPORT

17 active projects \$4.8 million. Information included in your packets for more detailed information on the projects.

Reice Haase presented the financial report that had been posted on the Industrial Commission/Renewable Energy website. The cash available for comment in your Renewable Energy fund is \$1.1M. This is the amount available for the rest of this biennium. There are four requests in front of you today totaling \$1.7M. If were to approve all these projects, you would be appropriating money that is coming in next biennium.

REPORT ON GRANT ROUND 51 APPLICATIONS

Four applications were received, four were sent to Technical Reviewers for peer review. Total amount being considered for Round 51 is \$1.7M. Rich Garman, of the Commerce Department, presented the Grant Round Requests.

CONSIDERATION OF SPECIAL GRANT ROUND 51 REQUESTS

R-051-A – Integrated Renewable Combined Heat and Power for Ethanol

Principal Investigator: Joshua R. Strege
Project Duration: 18 months
Requesting: \$450,000
Total Project Cost: \$2,250,000

Reviewers' Ratings

- Fund – 227/250
- Fund – 209/250
- Fund – 218/250
- Average Weighted Score – 218/250

Jason Laumb presented on the project.

Board member expressed the following concerns:

- Availability of biomass in agriculture.
- California market and carbon-free ethanol; are we going to overdo that market?
- California has passed resolutions to get rid of combustion engines; so does that market and premium go away?

Laumb stated they have some of the same concerns. When we did the initial feasibility study, we would only need to collect a fraction of the silver based on amount of corn delivered in one year. Based on averages, you would only need to collect a fraction of the stover based on the amount of corn grain that is delivered to Red Trail during one year. So the farmers that support the ethanol plant with the corn itself would only need a fraction of their stover to support the combined heat power.

Regarding the carbon footprint, there are entities now in Nebraska and Iowa that are pelletizing corn stover that is being harvesting locally. Would have to look at this so it doesn't raise the carbon back up.

LCSF market is a bit of unknown. Have to look at scenarios where if the tax credit is going away; look at other markets.

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Board member asked question regarding compressors with 5 megawatts. Laumb stated it would need a larger heat power system. They would look at that in the current study.

Questioned if they used half coal and half corn stover, what data on per ton basis? Laumb stated it's similar per pound to some of the low rank coals.

Also questioned utilizing the California model vs Oregon model.

R-051-B – Clean Hydrogen from High-Volume Waste Materials and Biomass

Principal Investigator: Dr. Michael L. Swanson

Project Duration: 21 months

Requesting: \$500,000

Total Project Costs: \$2,500,000

Reviewers' Ratings

- Fund – 210/250
- Fund – 184/250
- Fund – 221/250
- Average Weighted Score – 205/250

Dr. Mike Swanson presented on the project.

There was a question regarding the breakdowns of Simon Petri. Swanson stated that's where a lot of the PA and LCA work is being done. They are coming up with cost share and additional funding.

There was a question if EERC can do themselves. They could but it was requested to get an estimate to contract out. Most of this money is coming out of the DOE funding.

There was a question regarding Chad Wocken and EERC leading the hydrogen application and how it ties into that program if funded what values it brings in. Swanson stated the thought would be it would generate additional hydrogen plus carbon capture. Not a lot of information has been put out on that yet. Possibility of green hydrogen and oxygen generation.

R-051-C - DEFC Research and Development

Principal Investigator: Dr. Yang Yang

Project Duration: 2023-2025

Requesting: \$346,915

Total Project Costs: \$693,832

Reviewers' Ratings

- Funding May be Considered – 168/250
- Funding May be Considered – 150/250
- Fund – 183/250
- Average Weighted Score – 167/250

Brian LaPlante presented on this project.

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There was a question regarding the financials. LaPlante clarified the request is for \$346,000 to be split over two years.

R-051-D – CarbonConvert

Principal Investigator: Steve Bakken

Project Duration: 1 year

Requesting: \$500,000

Total Project Costs: \$4,500,000

Reviewers' Ratings

- Do Not Fund – 79/250
- Do Not Fund – 100/250
- Do Not Fund – 127/250
- Average Weighted Score – 102/250

Dave Blair introduced Marlo Anderson who participated on TEAMS. Marlo presented on this project.

CONFLICT OF INTEREST

Conflict of Interest forms were distributed. Members online will need to bring that forward to Reice.

Teigen stated he would entertain a motion to allow those board members that have a conflict of interest the ability to vote. Christianson moved to allow all members the ability to vote. Grindberg seconded the motion. Motion passed unanimously.

DISCUSSION/COMPLETION OF BALLOTS

R-051-A – Integrated Renewable Combined Heat and Power for Ethanol

Project Duration: 18 months

Requesting: \$450,000

Total Project Cost: \$2,250,000

Conflict of Interest:

Fund: 2 Do Not Fund: 3 Abstain: 0

R-051-B – Clean Hydrogen from High-Volume Waste Materials and Biomass

Project Duration: 21 months

Requesting: \$500,000

Total Project Costs: \$2,500,000

Conflict of Interest:

Fund: 2 Do Not Fund: 3 Abstain: 0

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R-051-C - DEFC Research and Development

Project Duration: 2023-2025

Requesting: \$346,915

Total Project Costs: \$693,832

Conflict of Interest:

Fund: 4 Do Not Fund: 1 Abstain: 0

R-051-D – Carbon Convert

Project Duration: 1 year

Requesting: \$500,000

Total Project Costs: \$4,500,000

Conflict of Interest:

Fund: 0 Do Not Fund: 5 Abstain: 0

Chairman Teigen entertained motion for the approval of the project recommended for funding. Christianson made a motion to approve Project 3. Bachmeier seconded the motion. Roll call vote all approved.

Chairman Teigen entertained motion for the do not fund project recommendations. Bachmeier moved to not approve the remainder of the projects. Christianson seconded the motion. Roll call vote passed unanimously.

ADMINISTRATIVE BUSINESS

Discussion for Proposed Round 52 Deadline – Monday, October 2, 2023

Proposed dates for next REC Meeting – November 13, 14 or 20, 2023

Reice explained the deadline and meeting date. Garman requested we have at least two weeks between application deadline and meeting date.

After discussion it was determined that the application deadline will be **Monday, October 2, 2023**.

Next REC meeting **Monday, November 6, 2023 (9:00-12:00 noon)**.

OTHER BUSINESS

Board members thanked Reice for the chart of active projects and suggested to add the date the project started.

ADJOURNMENT

Motion made by Christianson and seconded by Grindberg to adjourn the meeting. Teigen adjourned the meeting at 3:16 pm.



Josh Teigen- Chairman