

Minutes of the  
**RENEWABLE ENERGY COUNCIL (REC)**  
Monday, July 12, 2021 1:00 p.m.  
(CST)  
TEAMS Meeting via conference/video call  
ONSITE location Ft. Totten Room – Bismarck Capitol

Members Present	Staff Present	Guests Present
James Leiman	Andrea Pfennig, NDIC	Matthew Ward – Newlight/Incho
Gerald Bachmeier	Karlene Fine, NDIC	George Campbell – Newlight/Incho
Al Christianson	Andrea Rebsom, NDIC	Evan Creelman – Newlight/Incho
Terry Goerger	Maria Effertz Hanson - Commerce	Jeff Elliot – Newlight/Incho
Tony Grindberg	Sherri Frieze – Commerce	Adam Dunlup – Midwest Ag Energy Group
Rodney Holth	Jason Ehlert – Ehlert Excavating	
	Sydney Arends – ND Petroleum Council	

**WELCOME AND OPENING COMMENTS**

Member Al Christian served as proxy for Chairman Leiman until Leiman was able to call into the meeting via TEAMS. Christianson the called the Renewable Energy Council (REC) meeting to order at 1:00 p.m., welcoming members and guests in the room.

**APPROVAL OF MINUTES**

**It was moved by Bachmeier and seconded by Goerger to approve the April 20, 2021 meeting minutes. The motion carried unanimously.**

**PRESENTATION OF FINANCIAL STATEMENT**

Fine presented the financial report that had been posted on the Industrial Commission/Renewable Energy Program website. As of May 31, 2021, the uncommitted funds for the current biennium are \$1,913,183.21.

**It was moved by Bachmeier and seconded by Goerger to approve the Financial Statement as presented. The motion carried unanimously.**

**CLEAN SUSTAINABLE ENERGY AUTHORITY APPOINTMENTS**

Chairman Leiman joined the meeting via TEAMS at 1:15 p.m. He discussed the need for two appointments from the REC to be made today. Council member Tony Grindberg communicated his decision to retract his resume from the list of appointment, due to the understanding that non-REC members (public) could be considered for an appointment.

Bachmeier noted to the council, that the notice to receive applications for the council’s appointment was a small window and the pool of interested applicants was small and this brought concerns. Chairman Leiman expressed the force of timing and the expectation work of the Environmental, Social, Governance work that is currently taking a rapid acceleration in North Dakota. Leiman agreed that the timing of the REC meeting is not ideal, but four possible public candidates were received.

Members discussed a possible term limit for appointed REC members. Karlene Fine, Industrial Commission commented that the 2021-2023 legislature was silent on a term limit and should be decided upon the council.

**It was moved by Goerger and seconded by Christianson to approve a two and three-year appointment, as suggested. Motion carried.**

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**It was moved by Chairman Leiman and seconded by Holth to appoint Al Christianson to a three-year term for the Clean Sustainable Energy Authority. Motion carried.**

Roll Call was taken – James Leiman, Yes; Gerald Bachmeier, Yes; Al Christianson, Yes; Terry Goerger, Yes; Tony Grindberg, Yes; Rod Holth, Yes.

Justin Chapman - absent

**It was moved by Chairman Leiman and seconded by Bachmeier to appoint Terry Goerger to a two-year term for the Clean Sustainable Energy Authority. Motion carried.**

Roll Call was taken – James Leiman, Yes; Gerald Bachmeier, Yes; Al Christianson, Yes; Terry Goerger, Yes; Tony Grindberg, Yes; Rod Holth, Yes.

Justin Chapman - absent

#### **REPORT ON GRANT ROUND 47 APPLICATIONS**

Four applications were received, with three sent to technical review and one re-reviewed by staff as a minor adjustment. Two were denied based on reviewer's recommendations, leaving two to be reviewed for today's consideration.

Maria Effertz Hanson, Department of Commerce presented the Grant Round Requests, as Jonathan Russo has left the Department of Commerce.

#### **CONSIDERATION OF SPECIAL GRANT ROUND 47 REQUESTS**

##### **R-047 – A “Seismic Survey to Advance Potential for CO2 Storage in Eastern ND”**

Principal Investigator: Jeff Zueger

Project Duration: 6 months

Requesting: \$324,640

Total Project Cost: \$649,280

Maria gave an overview of the project and stated the applicant is contributing a 50% cash match of \$324,640.

##### **Project's Objective**

To achieve a better understanding of the potential for safe and permanent Carbon Dioxide (CO2) storage in deep saline formations in eastern ND. This project will collect and analyze data to better characterize the subsurface geological features in Stutsman and Barnes counties. Intend to acquire about 40 linear miles of 2D seismic images focusing on the Deadwood formation. This data will be used to evaluate large-scale structural trends, basement faults, depositional fabric, and depth prediction of reservoirs to assess the CO2 storage potential of the region.

##### **Reviewers' Ratings**

- Fund – 204
- Fund – 204
- Average Weighted Score – 204 out of 250

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**Achievability**

Goals are in line with the Renewable Energy Council (REC) and the project will develop a baseline of information for additional projects and development of Carbon Capture and Storage (CCS) outside of the Bakken region.

**Methodology**

No concerns with the methodology and a right fit for the problem

One reviewer noted the ‘distinguishing feature of the proposal is not the choice of methodology, but willingness of the team to search for carbon dioxide storage capacity outside of the regions that are rich in hydrocarbons.’

**Scientific/Technical Contribution**

Reviewers noted the information gathered will expand the knowledge base for carbon management energy projects. The reviewers noted that the results can provide a much broader understanding and comments that for full value the ND Industrial Commission and the REC will access to data collected.

**Knowledge/Awareness**

Team is clearly aware of the issues. Concern was raised of the PI not actively involved in the research but was confident the partners would have necessary background.

**Project Management**

All reviewers felt the project management plan was adequate or better.

**Value of Budget**

All reviewers felt the budget was of average or very high value.

**Overall Comments from Reviewers**

- One reviewer raised concern over the timeline, but felt it was justified in the application. Points of consideration:
  - Recommend the REC review past projects with the PI and determine if the timelines, outcomes, and budgets were consistent with expectations.
  - Ask for final raw data delivered is provided in a format that will be of most value to other regional experts on these topics, including the EERC.
  - The project would raise the probability of additional investment into low-carbon con-ethanol.
  - Would identify and strengthen CCS as a technology associated with renewable energy production; (This project could carry the concept to parts of the state that lack hydrocarbon resources and thus have not fully explored the underground storage capacity.)
  - Would maximize the market for ethanol by opening the California market.

**Technical Advisor Recommendations**

- Fund
- One area of concern that were noted, was the timeline but was addressed in the application based on availability of contractors and possibility of cost savings if able to collaborate with other projects.
- If funded, should request raw data to allow for additional research by the state.
- Project will greatly expand the ability and knowledge for CCR and storage outside of western North Dakota.

**Additional Recommendations**

- If successful, the project would provide benefits by 1.) securing high quality geophysical data in a safe, responsible and cost-effective manner, and maintaining positive public relationships throughout the project.
- If geology exists, discovery of suitable storage will very likely result in at least one commercial project.

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- If successful, these results could ensure that ethanol facilities continue operating, maintaining both jobs and a continuous market for ag producers who supply feedstock to these facilities.

**Suggested Contingencies if Funded**

- Request Raw data for state use.

**R-04 – C “Project Phoenix”**

Submitted by: Incoho Consulting Group & Newlight Technology

Principal Investigator: Jeff Elliot, Incoho Consulting Group, and Evan Creelman, Newlight Technologies

Project Duration: 5 months

Requesting: \$196,250

Total Project Cost: \$392,500

Maria gave an overview of the project and stated that Newlight Technology/Incoho is contributing a 50% cash match of \$196,250

**Project’s Objective**

To assess potential locations for one or more plants that will manufacture Newlight’s proprietary, patented, bio-degradable plastic alternative called AirCarbon™. If successful, it can both help address the impact of single-use plastics on the environment while helping the state achieve its goals around productivity utilizing the state energy resources while at the same time helping to reduce gas waste.

**Reviewers’ Ratings**

- Fund – 183
- Funding may be considered – 149
- Funding may be considered - 149
- Average Weighted Score – 160.30 out of 250

**Achievability**

Two reviewers felt the budget was adequate with one considering it significant but stated the correct team for the project would be achievable. One reviewer felt a phased approach may be more feasible with lower cost.

**Methodology**

Two reviewers had no issues with feasibility.

One reviewer believed the methodology could be improved with a staged approach, considering the cost of feedstock, utilities, and transport are possibly significant. The applicant responded with agreement, and the reason for the high level of assessment

**Scientific/Technical Contribution**

Reviewers rated this section low. While the technology itself does not sound particular novel, the scale up and wide use production of AirCarbon can have major impacts in the state level economy/environment of North Dakota. One reviewer said no discussion of which renewable source would be used.

**Knowledge/Awareness**

One reviewer stated the proposal has working knowledge of the industry. One reviewer stated the technology is not carbon negative. One reviewer suggested the applicant identify natural gas availability in plant location review.

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**Project Management**

All reviewers felt comfortable with the background and experience. The timeline appeared to be adequate and the facilities and equipment were not relevant to this proposal.

**Value of Budget**

All reviewers felt the budget was of appropriate.

**Overall Comments from Reviewers**

- One reviewer was concerned the project did not focus enough on the resources needed for the project including: 1) renewable electricity, 2) waste methane, 3) water, and 4) labor (which was not discussed).
- One reviewer raised concern regarding the applicant did not provide how the funds would be spent. In summary, reviewer felt it was a solid proposal, but would like to see more information as to how the funds will be spent and believed some of the claims regarding carbon-negative projections.
- One reviewer recommended funding but suggested a reduced scope of a phased approach focusing on defining the critical factors, viability, and North Dakota specific factors.

**Technical Advisor Recommendations**

- Fund considered
- This project promotes efficient, economic and environmentally sound development and creates a new industry opportunity for the state:
  - Creating environmentally friendly jobs linked to the production and utilization renewable energy resources in the plant and in the upstream and potentially downstream industries.
  - Promoting economic stability and growth in the renewable energy industry and diversifying the market for the state’s vast gas and CO2 feedstocks.
  - Promoting completely new industry in the state with potential clustering options.

**Suggested Contingencies if Funded**

- Strong participation by the State (Commerce Department) with applicant or siting studies.
- Clear definition of what is required for plant locations including feedstock, by products and energy requirements.

**Member discussion:**

No discussion by members.

**Project R-47 – A “Seismic Survey to Advance Potential for CO2 Storage in Eastern ND”**

In response to a question, companies that receive the correct permit will understand if there are fractures or faults in that region and the data will show that the region is not suitable for CO2 sequestration.

In response to a question, if the well and pad are on private property, the landowner will incur lease and agreement for payments for loss of surface material. Over the next 10-30 years, the CO2 plume may travel outside the drill pad area and other landowners would be entitled to compensation. Currently a feasibility study is being conducted on this research.

**Project R – 47 – C “Geothermal Development Consortium”**

In response to a question, we are capturing the gas, producing the biodegradable polymers (pellets), stamping the cutlery and straws by injection mold. We will partner with other companies in here in ND, if they currently have this operation in place

