MEETING MINUTES

LIGNITE RESEARCH COUNCIL
GRANT ROUND 109

Friday, May 8, 2026 – 8:30 a.m. (CT)
Bismarck State College NECE Room 335 or Microsoft Teams

LRC VOTING MEMBERS PRESENT:
Jonathan Fortner – Lignite Energy Council, Chairman
Jay Kost – The Falkirk Mining Company
Ethan Vaagene – Rainbow Energy Center
Reese Boehm – Nexus Line, LLC
Randy Christmann – North Dakota Public Service Commission
Tom Oakland – North Dakota Commerce
Donn Steffen - Coyote Creek Mine
Trinity Turnbow – Dakota Gasification (on-line)
Jim Sheldon – Basin Electric Cooperative
Brad Zimmerman – Otter Tail Power Company
Anna Novak – North Dakota House of Representatives (on-line)
Charlie Gorecki – EERC
Tim Hagerott – Minnkota Power Cooperative
Keith Boehm – North Dakota Senate
Bill Sawyer – ALLETE (on-line)
Joseph Heringer – Land Board
Rita Faut – North Dakota Farm Bureau
Ed Murphy – North Dakota Geological Survey
John Phillips-ND Coal Conversion Counties Assn.
Dan Laudal, UND College of Engineering and Mine Research Institute
Andy Hawbaker, Coteau
Darcy Neigum, Montana Dakota Utilities (on-line)

OTHERS PRESENT:
Jordan Kannianen – North Dakota Industrial Commission
Karen Tyler – North Dakota Industrial Commission (on-line)
Carmen Devney – North Dakota Industrial Commission
Mike Holmes – Lignite Research Council
Jason Laumb – Lignite Research Council
Angie Hegre - Lignite Energy Council
Retha Mattern – Lignite Energy Council (presenter)
Jim Sheldon – Basin Electric Cooperative
Greg Henthorne – Ore Spring Materials LLC, by AmeriCarbon Enterprises, LLC. (presenter)
Bob Wentz – Ore Spring Materials LLC, by AmeriCarbon Enterprises, LLC. (presenter)
Josh Stanislowski – EERC (presenter)
Jim Sorenson – EERC (presenter)
Alex Benson – Microbeam (presenter)
Hunter Green (on-line)
Noah Galloway, BNI (on-line)

I. CALL TO ORDER

Meeting Called to Order:

Lignite Research Council (LRC) Chairman Jonathan Fortner called the meeting to order at 8:35 a.m. on November 18, 2025.

Fortner introduced Jason Laumb as the incoming Technical Advisor for the Lignite Research Program and recognized Mike Holmes for his 10 years of dedicated service in the role.

Fortner also acknowledged the upcoming retirements of LRC members Dave Glatt and Ed Murphy, thanking them for their service and contributions to the Council.

Carmen Devney provided an overview and demonstration of the Grant Management System (GMS). Council members were able to ask questions and provide feedback. The discussion included questions, concerns, and suggestions regarding the system and its implementation.

II. APPROVAL OF MINUTES

Approval of November 18, 2025, LRC Meeting Minutes:

Jonathan Fortner requested a motion to approve the minutes from the meeting listed above. John Phillips so moved; seconded by Jay Kost; motion carried.

III. UPDATES

Program Management & Financial Report:

Jordan Kannianen shared the financial summary for the Lignite Research, Development, and Marketing Program. (A copy of the financial summary is available in the Lignite Research Program files)

Kannianen displayed a high-level dashboard view summary of all the Industrial Commission-managed funds to the committee. Kannianen shared that the Lignite Research Fund availability as of May 2026, is $5.1 million, which is the amount available to commit to new projects. Kannianen shared that there are four projects before the committee today with an ask just under $7.7 million.

Kannianen brought forth to the committee the Lignite Research fund cash balance of $22.7 million with $17.5 million of that having outstanding project commitments. Kannianen shared that the total of $5.1 million is uncommitted and available while considering new projects.

For the Lignite Research Fund, Kannianen provided a cumulative view of the fund. Since the program's inception in 1987, 264 cumulative projects have been funded. Each of those projects brings private capital and private match back to the state of North Dakota. That private match has equaled $2.8 billion project value that has been invested in the state of ND, thanks to projects approved through this program. Currently, there are 15 active projects.

In addition, Kannianen shared the 2025-2027 biennium appropriation and forecasted income. Sharing a graphic showing the Lignite research fund money coming from the Coal Severance Tax, Coal Conversion Tax, Research Tax, and formula funding from Oil Production and Extraction Taxes, showing a total of $18.5 million through the course of the biennium.

The financial data was emailed before the meeting to the LRC members.

IV. CONSIDERATION OF PROJECTS

Project 109A
Introduced by Jason Laumb. Presented by Greg Henthorne.

LRC-109A: The Forge Project: Rare Earths and Critical Materials Integration
Submitted by: Ore Spring Materials, LLC, by AmeriCarbon Enterprises, LLC.
Principal Investigator: Greg Henthorne
Request for: $1,175,000
Total Project Costs: $4,600,000
Project Duration: 24 months

The objective of the project is to demonstrate and advance the integration of AmeriCarbon's Eco-Pitch™ carbon manufacturing process with rare earth element (REE) and critical mineral (CM) recovery technologies developed by the University of North Dakota (UND) and Microbeam Technologies, Inc. As AmeriCarbon works toward commercial application of North Dakota lignite conversion into carbon products integration with REE and CE extraction could diversify the product and enhance the economics.

Technical Advisor, Jason Laumb shared his recommendation to fund with the contingencies below. The AmeriCarbon process shows good potential for producing graphite precursors and asphalt binder. The average score of 210 out of 250. The technology has also received Clean Sustainable Energy loan and grant funding in addition to previous support from the Lignite Research Program. The project team should address scale-up questions posed in the technical review process. The recommendation includes the following conditions:

1) Semi-annual reporting will be provided to the Industrial Commission,
2) The project team reviews project plans with the technical advisor.
3) Address graphite scale-up questions.

Laumb shared that the conflict of interest included North American Coal.

A copy of the PowerPoint presentation is available in the LRP files.

Project 109B
Introduced by Jordan Kannianen. Presented by Retha Mattern.

LRC-109B: Lignite Energy Council Education Program
Submitted by: Lignite Energy Council
Principal Investigator: Retha Mattern
Request for: $550,000
Total Project Costs: $1,150,000
Project Duration: 39 months

Kannianen shared that the applicant is requesting funding for three and one-quarter years to continue the Lignite Education Program. Funding includes costs for the annual four-day Lignite Education Seminar, program management for the Education Program, and the costs for professional services provided through the ND Energy Career Awareness program. The objective of this program is to educate teachers, students, and members of the general public in the region about career opportunities, energy production, economic benefits, and operations of the Lignite Industry.

The expected outcomes of the Project include:

- Improved perception of lignite
- Increased awareness of the regional lignite economy, and
- Increased understanding of future growth opportunities within the lignite industry

The NDIC Deputy Executive Director's recommendation shared that the three technical reviewers recommended fully funding the project. The reviewers provided positive comments about the objectives, achievability, methodology, contribution, awareness/background of the principal investigators and the budget. The program is in its 40th year and continues to build on the ongoing success of the lignite education seminar as well as education initiatives for teachers and students on lignite energy production, economic impact, and environmental stewardship. The three reviewers recommended funding, with an average score of 223.3 out of 250. He shared that the funding would be subject to semi-annual reporting provided to the Industrial Commission. He shared that conflicts of interest included Lignite Energy Council and members of the Lignite Energy Council.

Kannianen shared that the conflict of interest included North American Coal.

A copy of the PowerPoint presentation is available in the LRP files.

Project 109C

Introduced by Mike Holmes. Presented by Jim Sorensen.

LRC-109C: Bakken Cracking the Code 2.0: Broad Infrastructure and Development for CO_2-Based EOR

Submitted by: EERC
Principal Investigator: Jim Sorensen
Request for: $5,000,000
Total Project Costs: $10,000,000
Project Duration: 30 months

Mike Holmes shared the proposed work focuses on a comprehensive engineering study of the infrastructure needed to source and deliver CO_2 for enhanced oil recovery (EOR) in the Bakken. The assessment includes capture and transport from North Dakota coal-fired plants and the Dakota Gasification Company gasification plant. This is the Lignite Research Program portion of the Bakken 2.0 program which has extensive analysis of the EOR opportunity in the Williston Basin. The project is also part of the Bakken EOR-Cracking the Code Program and is an approximately $142,000,000 multi-sector effort involving DOE, NDIC, and at least five ND Bakken producers to accelerate the deployment of Bakken EOR.

Holmes shared that the technical reviewers recommended funding. The proposed project is the next step for bringing EOR to North Dakota's Bakken petroleum system. Technical Advisor feels this is one of the most important opportunities to maintain and grow the strength of North Dakota's economy. Two of the technical reviewers recommended funding the project and one recommended not funding. The proposal received an average score of 206 out of 250. As mentioned above, this project is in addition to the Oil & Gas Research Program effort to demonstrate extraction of additional oil from the Bakken using CO_2 from coal facilities and other sources.

Holmes shared that the funding would be subject to the technical advisor's participation in project reviews and the Technical advisor reviews the project management plan with the project team He shared the conflict of interest would be the EERC.

A copy of the PowerPoint presentation is available in the LRP files.

Project 109D

Introduced by Jason Laumb. Presented by Alex Benson.

LRC-109D: Demonstration of REE-CM Exploration and Characterization Technologies for ND Lignite

Submitted by: Microbeam Technology

Principal Investigator: Alex Benson
Request for: $971,225
Total Project Costs: $1,956,105
Project Duration: 32 months

Jason Laumb shared that the overall objective is to demonstrate critical mineral (CM), including rare earth element (REE) exploration technologies and characterize the Center Mine coal resource for available REE-CM. The project would continue development of two methods for estimating REE-CM concentrations in the field using commercial analytical equipment that does not currently provide this information. Both methods can be used in the field and provide REE-CM estimations in a short period of time (within 24 hours of sample collection).

This project is expected to provide a further understanding of the REE-CM accumulation mechanisms and associations of REE-CM in ND lignite resources. This project will also demonstrate two technologies that can improve REE-CM exploration efforts. The results of this project will demonstrate the measurable improvement of utilizing these technologies for REE-CM exploration. If successful, this new technology will greatly reduce the time and funding needed to perform initial characterization on a new resource.

Laumb shared that the two technical reviewers recommended funding. The proposal received an average score of 199 out of 250. The project leverages state funding with Microbeam in-kind and cost share from BNI Energy. The technical advisor suggested funding subject to the technical advisor participating in project reviews, including go/no go decisions. He also shared that he needs to also review the project management plan with the project team. Laumb listed BNI Energy as a conflict of interest.

V. Voting Process

Andy Hawbaker, Dan Laudal, Jay Kost, Don Steffen, and Anna Novak disclosed potential conflicts of interest to the Council. Following these disclosures, Ed Murphy made a motion to acknowledge the identified conflicts and proceed in accordance with the established voting procedures, allowing those individuals to participate in the vote. The motion was seconded by Rita Faut and approved by the Council. Ballots were then distributed, collected, and tabulated.

Other Business

Jonathan Fortner shared the suggested Lignite Research Program logo. Each committee member was asked to select their two favorite options. The committee will provide these two suggestions to the NDIC for them to make the final decision.

Fortner announced that the next North Dakota Industrial Commission meeting, where these recommendations will be considered, is scheduled for Tuesday, May 12, 2026.

The logo selected by the NDIC is at the header of these minutes.

VI. RESULTS

All four projects were unanimously approved.

LRC-109A: The Forge Project: Rare Earths and Critical Materials Integration
Submitted by: Ore Spring Materials, LLC, by AmeriCarbon Enterprises, LLC.
Fund: 15
Do Not Fund: 0
Abstain: 3

LRC-109B: Lignite Energy Council Education Program
Submitted by: Lignite Energy Council
Fund: 18
Do Not Fund: 0
Abstain: 0

LRC-109C: Bakken Cracking the Code 2.0: Broad Infrastructure and Development for CO_2-Based EOR
Submitted by: EERC
Fund: 17
Do Not Fund: 0
Abstain: 1

LRC-109D: Demonstration of REE-CM Exploration and Characterization Technologies for ND Lignite
Submitted by: Microbeam Technology
Fund: 18
Do Not Fund: 0
Abstain: 0

Jonathan Fortner called for a motion to forward the project voting results to the North Dakota Industrial Commission (NDIC) for consideration at its May 12, 2026, meeting. Charlie Gorecki made the motion, which was seconded by Andy Hawbaker. The motion carried unanimously.

VII. 2026 Calendar

- Industrial Commission Meeting: May 12, 2026
- Fall Grant Deadline – October 1, 2026
- Fall LRC Meeting – November 12, 2026

VIII. Adjourn

Jonathan Fortner called for a motion to adjourn the Lignite Research Council meeting. Andy Hawbaker made the motion, which was seconded by John Phillips. The motion carried, and the meeting was adjourned.

Angie Hegre, recording secretary