

Minutes of a Meeting of the Clean Sustainable Energy Authority Technical Review

Committee Held on January 16th, 2024 at 9:00 a.m.

BND Missouri River Conference Room, 1200 Memorial Highway, Bismarck, ND

Present: Sen. Dale Patten, Co-Chair
Rep. Glenn Bosch, Co-Chair
Todd Steinwand
Kelvin Hullet
Courtney Heiser
Josh Teigen
Dave Glatt
Rachel Retterath
Claire Vigesaa
Lynn Helms
Tom Erickson
Justin Kringstad
Erin Stieg
Reice Haase
Andra Travicek
John
Paczkowski
Rich Garman

Also Present: Raj and Kayla Effertz- Klevin from NextEra. Not all attendees are known as this meeting was held through Microsoft Teams.

Sen. Dale Patten called the meeting of the Clean Sustainable Energy Authority Technical Review Committee to order at 9:00 a.m. Sen. Patten declared a quorum present in this meeting.

It was moved by Mr. Kelvin Hullet and seconded by Ms. Rachel Retterath that the January 16th, 2024, agenda be approved as presented, and to approve the July 18th, 2023, Technical Review Meeting Minutes as presented. The motion carried unanimously.

Mr. Reice Haase provided the committee with an overview of Industrial Commission activities and legislative updates affecting the Clean Sustainable Energy Authority (CSEA). Mr. Haase reviewed current funding, project activity, and Round 5 applications, reporting that 14 projects remain active. He discussed fund balances, grant and loan commitments, project status updates and cumulative investment activity, and provided updates on project outcomes, including reported economic impacts and carbon emissions reductions associated with funded projects.

Ms. Andrea Travnicek provided an overview of the Department of Water Resources, including the department's organizational structure, Water Commission Membership and responsibilities related to management of North Dakota's water resources. The presentation included information regarding regional and rural water systems, major water infrastructure and project locations, water permitting

requirements, water availability for economic development, and ongoing aquifer recharge initiatives intended to enhance long-term water supply resiliency. She also discussed current and future water development efforts throughout the state.

Justin Kringstad provided an update on North Dakota natural gas infrastructure and market conditions, including residue gas pipeline capacity, pipeline connectivity and flow patterns, regional storage capacity, natural gas processing trends, and infrastructure needs. The presentation also addressed natural gas utilization, flaring reduction efforts, and projected transportation and market capacity considerations associated with future development activity.

Claire Vigessaa of the North Dakota Transmission Authority provided an updated regarding electrical infrastructure needs associated with projects under review and reported no identified concerns related to grid connectivity.

Sen. Patten requested the members to declare any conflicts of interest, to which Justin Kringstad, Tom Erickson, and Josh Teigen responded.

Mr. Haase presented 9 applications from Grant Round 5 for review:

C-05-A Clean H2 and N-Fertilizer Production Facility

- Applicant: Prairie Horizon Energy Solutions LLC
- Grant Funding Requested: \$0
- Loan Requested: \$125,000,000
- Total Project Costs: \$2,200,000,000
- Duration: August 2025-December 2028
- Project: Installation of facilities capable of 73,000 tons/year of clean hydrogen via electrolysis, 419,750 ton/year of clean ammonia, and a urea production facility associated with the Heartland Hydrogen Hub; CO2 reduction of \$190,000 tons/year.

C-05-B Spiritwood Fertilizer Project

- Applicant: NextEra Energy Resources Development, LLC
- Grant Funding Requested: \$0
- Loan Requested: \$125,000,000
- Total Project Costs: \$1,293,000,000
- Duration: 2024-2028
- Project: Construction of a production facility near Jamestown, North Dakota, capable of 100,000 tons/year of zero-carbon anhydrous ammonia through electrolysis of water.

C-05-C "Green" Pig Iron Production Facility

- Applicant: Scranton Holding Company/North American Iron, Inc.
- Grant Funding Requested: \$12,000,000
- Loan Requested: \$0
- Total Project Costs: \$2,000,000,000
- Duration: 2024-2026
- Project: Construction of a processing facility in North Dakota, capable of producing 2 million

tons per year of near carbon-neutral pig iron.

C-05-D Unlocking the Full Potential of Produced Water

- Applicant: Wellsprings Hydro
- Grant Funding Requested: 5,000,000
- Loan Requested: \$25,000,000
- Total Project Costs: \$324,730,000
- Duration: 2024-2026
- Project: Continued engineering and design; and an issue for purchase to make downpayments on equipment used for the proposed water recycling facility in Williams County.

C-05-E Blue Ammonia Facility

- Applicant: Catalyst Midstream (USA), LLC
- Grant Funding Requested: \$10,000,000
- Loan Requested: \$0
- Total Project Costs: \$960,000,000
- Duration: 2024-2025
- Project: Construction of a blue ammonia facility located in Berthold, North Dakota that can produce 1,080,00 tons/year.

C-05-G Dickinson Renewable Fuel Facility Expansion

- Applicant: EERC
- Grant Funding Requested: \$10,000,000
- Loan Requested: \$0
- Total Project Costs: \$21,761,930
- Duration: March 2024-February 2026
- Project: Expansion of Dickinson renewable fuels refinery to add sustainable aviation fuel production.

C-05-H Energy Storage Technology for Lithium-Ion Batteries

- Applicant: Dakota Lithium Materials
- Grant Funding Requested: \$4,000,000
- Loan Requested: \$0
- Total Project Costs: \$10,250,000
- Duration: 2024-2027
- Project: Construction of demonstration facility at UND to produce 1,000 tons/year of lithium iron phosphate materials.

C-05-I Grand Power North Dakota Battery Manufacturing Plant

- Applicant: Packet Digital
- Grant Funding Requested: \$10,000,000
- Loan Requested: \$17,355,992
- Total Project Costs: \$56,558,592
- Duration: 2024-2026
- Project: Construction of a high energy lithium-ion battery manufacturing facility in Fargo, ND with ten times the current life cycle of batteries currently available.

C-05-J Carbon Convert Prototype

- Applicant: Carbon Convert
- Grant Funding Requested: \$500,000
- Loan Requested: \$0
- Total Project Costs: \$4,500,000
- Duration: January 2024 – November 2024
- Project: Using artificial photosynthesis to convert CO2 into oxygen and carbon monoxide.

C-05-K Cerilon GTL

- Applicant: Cerilon
- Grant Funding Requested: \$20,000,000
- Loan Requested: \$80,000,000
- Total Project Costs: \$3,600,000,000
- Duration: 2024-2028
- Project: Continued engineering and design of the Trenton gas-to-liquids facility.

C-05-L NDeV Flare Gas Mitigation Project

- Applicant: ND Energy Ventures
- Grant Funding Requested: \$3,000,000
- Loan Requested: \$10,000,000
- Total Project Costs: \$30,000,000
- Duration: 2024-2025
- Project: Demonstration project for conversion of natural gas into carbon black and zero-carbon hydrogen using absolute pyrolysis technology.

Sen. Patten asked for a motion to be made to enter executive session to discuss confidential information.

A motion was made by Mr. Erickson and seconded by Mr. Hullet that under the authority of the N.D.C.C. 54-63.1-06 and 44-04-19.2.1 that the Clean Sustainable Authority Technical Review Committee enter into an executive session for the purpose of considering Clean Sustainable Energy confidential information.

On a roll call vote Tom Erickson, Dave Glatt, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Clair Vigasaa, and Kelvin Hullet all voted aye. The motion carried unanimously.

Sen. Patten stated that the Clean Sustainable Energy Authority Technical Committee is entering into executive session to discuss confidential information. He stated that only CSEA members and ND Industrial Commission staff will be present during executive session. Any formal action will be taken in open session. Sen. Patten reminded those present that the discussion must be limited to the announced purpose which is projected to last approximately 1 hour.

The executive session began at 12:01p.m.

The Meeting Closed to the Public for Executive Session Pursuant to NDCC 54-63.1-06 and 44-04-19.2.1.

CLEAN SUSTAINABLE ENERGY AUTHORITY TECH COMMITTEE EXECUTIVE SESSION

Present:

Sen. Dale Patten

Rep. Glenn Bosch
Todd Steinwand
Courtney Heiser
Justin Kringstad
Dave Glatt
Lynn Helms
Rachel Retterath
Al Christianson
Josh Teigen
Tom Erickson
Claire Vigesaa
Reice Haase
Erin Stieg

Executive session ended at 1:47p.m. and reconvened in open session.

Project voting results are as follows:

C-05-A:

- Average: 41.75/50.00
- Recommendation: Feasible w/Conditions- Development and future approval of metrics for determining commercial viability.
- Vote: 7-0

A motion was made by Mr. Kelvin Hullet and seconded by Mr. Justin Kringstad to recommend funding Application C-05-0A, contingent upon the development and future approval of metrics for determining commercial viability.

On a roll vote Tom Erickson, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-B:

- Average: 39.13/50.00
- Recommendation: Feasible w/Conditions- Metrics for determining commercial viability to be determined and approved later.
- Vote: 7-0

A motion was made by Mr. Kelvin Hullet and seconded by Justin Kringstad to recommend funding Application C-05-B, contingent upon the development and future approval of metrics for determining commercial viability; and validation of the water number.

On a roll vote Tom Erickson, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-C:

- Average: 39.13/50.00

- Recommendation: Feasible w/Conditions- Development of a plan addressing project waste disposal.
- Vote: 7-0

A motion was made by Mr. Erickson and seconded by Mr. Helms to recommend funding Application C- 05-C, contingent upon the development and submission of a plan addressing project waste disposal.

On a roll vote Tom Erickson, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-D:

- Average: 36.25/50.00
- Recommendation: Feasible w/Conditions- Completion of the previously funded grant project prior to additional funding being awarded.
- Vote: 7-0

A motion was made by Ms. Rachel Retterath and seconded by Mr. Kelvin Hullet to recommend funding Application C-05-D, contingent upon the completion of the previously funded grant project prior to additional funding being awarded.

On a roll vote Tom Erickson, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-E:

- Average: 38.88/50.00
- Recommendation: Feasible w/Conditions- Obtain a firm commitment for rail transportation.
- Vote: 7-0

A motion was made by Mr. Josh Teigen and seconded by Ms. Rachel Retterath to recommend funding Application C-05-E, contingent upon obtaining a firm commitment for rail transportation.

On a roll vote Tom Erickson, Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-G:

- Average: 47.86/50.00
- Recommendation: Feasible
- Vote: 6-0

A motion was made by Mr. Justin Kringstad and seconded by Mr. Lynn Helms to recommend funding for Application C-05-G.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-H:

- Average: 37.57/50.00
- Recommendation: Feasible

- Vote: 6-0

A motion was made by Mr. Josh Teigen and seconded by Mr. Kelvin Hullet to recommend funding for Application C-05-H.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-I:

- Average: 39.29/50.00
- Recommendation: Feasible
- Vote: 6-0

A motion was made by Mr. Josh Teigen and seconded by Mr. Kelvin Hullet to recommend funding for Application C-05-I.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-J:

- Average: 29.00/50.00
- Recommendation: Not Feasible
- Vote: 6-0

A motion was made by Mr. Lynn Helms and seconded by Mr. Justin Kringstad to not recommend funding for Application C-05-J.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-K:

- Average: 44.57/50.00
- Recommendation: Feasible
- Vote: 6-0

A motion was made by Mr. Lynn Helms and seconded by Mr. Justin Kringstad to recommend funding for Application C-05-K.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

C-05-L:

- Average: 29.57/50.00
- Recommendation: Not Feasible
- Vote: 6-0

A motion was made by Mr. Josh Teigen and seconded by Mr. Kelvin Hullet to not recommend funding for Application C-05-L.

On a roll vote Lynn Helms, Justin Kringstad, Josh Teigen, Rachel Retterath, Claire Vigesaa, and Kelvin Hullet all voted aye. Motion carried unanimously.

With no further business, Rep. Bosch adjourned the meeting at 2:01 p.m.