

### MEMORANDUM OF UNDERSTANDING Mid-Continent Clean Hydrogen Hub – MCH2

This Memorandum of Understanding ("MOU") made on this <u>4th</u> day of April, 2023, by and between the States of Iowa, Missouri, and Nebraska, establishes a framework for coordinating and developing a regional clean hydrogen hub ("Hydrogen Hub") as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 ("Act"). The States of Iowa, Missouri, and Nebraska have created the Mid-Continent Clean Hydrogen Hub ("MCH2") and may be referred to collectively as "Participating States" or "Signatory States." MCH2 consists of a world class and diverse team, including Monolith Materials, Inc., Project Meadowlark, VERBIO, Ideal Energy, and Greenfield Nitrogen (collectively the "Parties").

WHEREAS, clean hydrogen has the potential to advance the interests of the Participating States in clean air, reduction of carbon emissions, jobs, rural and urban economic development, and equitable energy opportunities.

WHEREAS, the 2021 Act allocates \$8 billion in funding for four or more regional hydrogen hubs.

WHEREAS, the Participating States are uniquely qualified and situated to serve as a Hydrogen Hub with a thriving hydrogen economy given the presence of high-quality wind, solar, biomass, nuclear, agricultural, and other energy resources; a sophisticated oil and natural gas industry; a robust energy transportation infrastructure; an established carbon management infrastructure and favorable geology; early-stage public and private hydrogen economy development initiatives; world-leading national laboratory facilities and academic institutions; and industrial areas that are potential early adopters of clean hydrogen technologies.

WHEREAS, addressing the shared challenges of a healthy environment and modern energy economy require regional collaboration.

WHEREAS, the agricultural assets of the Participating States are complementary, including crop, animal, fertilizer production, and end users.

WHEREAS, the energy assets of the Participating States are complementary, including electricity generation sources, pipelines, underground storage availability, and end users.

WHEREAS, the success of a Hydrogen Hub rests firmly on the collaboration, leadership, and innovation of states, researchers, and private businesses with diverse expertise and talents.

WHEREAS, a cost-effective strategy with the ability to scale the production, transportation, storage, and use of clean hydrogen benefits from interstate collaboration and coordination.

WHEREAS, the Participating States share a mutual interest in the demonstration and growth of clean hydrogen production, transportation, storage, and use to advance their individual and collective goals.

NOW, THEREFORE, the Governors of the Participating States agree as follows:

### I. Commitment

The Signatory States hereby pledge their support for MCH2 for funding under the Act that advances a compelling vision for a hydrogen economy, including production and use in the central United States ("U.S"). The Signatory States are committed to an application that works with academic, research, industry, and community partners and stakeholders to ensure the application:

- Drives economic growth and development for each of the participating states and the region.
- Incorporates the latest science, research, and technology for the cost-effective production, transportation, storage, and use of clean hydrogen.
- Ensures protections for and the participation of frontline and disadvantaged communities, including safeguards around public health, safety, and labor.
- Develops a pathway for workforce development and training.



- Provides for information exchange and collaborative research, including engagement with research and educational institutions, to maximize economic opportunities, monitor emissions and MCH2 performance, and thoughtfully plan expansion of MCH2 and the use of hydrogen technology over time.
- Addresses pipeline safety, leak minimization, and pathways for new pipeline construction.
- Proactively evaluates and addresses the potential impacts of hydrogen production on water use and seeks opportunities to use water that is currently used for or generated by other industrial or power generation purposes.
- Engages key stakeholders, including end-users in the agricultural, industrial, buildings, aviation, power generation, and transportation sectors.
- Addresses the air quality impacts of hydrogen production, transportation, storage, use, and combustion, including emissions of nitrogen oxides.
- Identifies current and possible State resources, incentives, policies, and plans that can be leveraged in support of a flourishing and competitive hydrogen economy among the participating States.
- Respects the unique needs and policy approaches of each participating State.

The MCH2 will conduct its work by Participating States' collaboration in the creation of a robust and sustainable model that will include hydrogen production pathways and volumes from multiple sources, transportation and storage, market / fabrication / end user, and carbon intensity metrics. The model will be able to optimize on a state-by-state or regional perspective. The results of the model will inform the Participating States' activities, but shall not bind the Participating States to particular actions or outcomes.

### II. Hub Oversight and Management Agreements

In addition to an application for funding, the Parties intend to develop and finalize a Collaboration Agreement ("Collaboration Agreement"). The Collaboration Agreement shall set forth the structure, governance, obligations, expectations, management, and oversight of the Hydrogen Hub and the roles, responsibilities, obligations, and authority of the Parties involved in the Hydrogen Hub for the entire duration of MCH2. The Collaboration Agreement will confirm the methodology for the distribution of any U.S. Department of Energy (DOE) funds through the MCH2 regional hub.

### III. Timeline

The Participating States collective work will meet FOA DOE submittal team deadlines for Federal funding opportunities for regional hydrogen hubs for the final FOA and support submittal submission of an application by the due date of April 7, 2023.

### **IV. Disclosure of Information**

Participating States and those entities performing contractual services on behalf of the MCH2 will not make public or private representations as to the purpose or intent behind each Participating State's participation, except as expressly agreed to by the respective Participating State. As governed by the laws and regulations of each Participating State, Participating States and those entities performing contractual services on behalf of the MCH2 will maintain the confidentiality of details pertaining to the Hydrogen Hub.

### V. Additional Member States

Upon agreement of all Participating States, additional States may be added to this MOU to support the MCH2, subject to the provisions being developed under the Collaboration Agreement, to enhance the ability to establish a Hydrogen Hub.

### VI. Voluntary Initiative

This MOU is not legally binding and does not create any legal, equitable, or financial rights, commitments, obligations or liabilities for the Participating States. Any Participating State may cease cooperation under this MOU at any time upon written notice to the other Participating States. This MOU may be amended by a written



instrument signed by each Participating State. The terms of this MOU do not preclude any Participating State from participation in other efforts, including, but not limited to, other hydrogen hubs.

Administrative costs to support the MCH2 funding application to the DOE will be based on any use of consultation work to support specific funding project requests, modeling, or evaluation and in accordance with the terms of the DOE award. Funding support for any State-based projects for this application and any future requests will be governed by the respective projects' corresponding budget funding requests. This MOU does not obligate any Participating State to receive, distribute, or contribute any funds for these purposes.

### VII. Duration

This MOU is at-will and may be terminated by any State upon written notice to the other States. The MOU will continue following any such termination, so long as the remaining Participating States agree.

[Signature page follows]



IN WITNESS WHEREOF, the Participating States have executed the foregoing Memorandum of Understanding effective as of the date first indicated above.

State of Iowa

ly

By: Kim Reynolds

Title: Governor

Date: 4/5/23

State of Missouri



By: Mike Parson

Title: Governor

Date: 4/4/2023

### State of Nebraska



By: Jim Pillen

Title: Governor

Date: 4/4/23

# monolith

March 31, 2023

The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

### Re: Letter of Commitment for Nebraska Public Power District Regional Clean Hydrogen Hub

Dear Secretary Grandholm,

Monolith Materials, Inc. (Monolith) is pleased to offer support for Nebraska Public Power District's (NPPD) Mid-Continent Hydrogen Hub (MCH2 Hub or Hub) application for the U.S. Department of Energy's (DOE) Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779). As a key participant in the MCH2 Hub, Monolith will annually produce 55,000 metric tons of clean hydrogen, producing 275,000 TPD of clean ammonia, and 180,000 metric tons of clean carbon black at the company's Olive Creek 2 (OC2) facility.

Monolith has perfected methane pyrolysis, which uses 100% clean electricity to convert natural gas or renewable biogas into clean hydrogen, which can be synthesized into clean ammonia, and clean carbon black, an indispensable input for manufacturing tires and an essential component in everyday products such as construction materials, printing inks, plastic trash bags, most electronics, and batteries. Monolith's planned OC2 facility will be built in the heart of America's Corn Belt, allowing the company to provide clean ammonia to the region's agriculture industry, aiding in the decarbonization of the country's food production.

The MCH2 Hub represents a stunning decarbonization and economic opportunity for the United States and the Midwest. As a critical member of the Hub, Monolith's growth will create unprecedented careers through high-paying, highly skilled, advanced manufacturing positions that will make a real, positive impact on the planet. These are life-changing, long-term, greenenrgy jobs that families and communities can count on to help them prosper. Monolith is changing the planet for the better while creating opportunities for American families.

As the Executive Vice President of Development, I am authorized to commit Monolith to support NPPD as described in this letter. Further, I commit that Monolith will provide NPPD with technical support to enable the MCH2 Hub to successfully collect and analyze performance and other data needed for project deliverables to the DOE.

Sincerely,

amy Ostumiye

Amy Ostermeyer Executive Vice President of Development

134 South 13<sup>th</sup> St. Suite 700 Lincoln, NE 68508

Main: 402.413.5763

monolith-corp.com

# JWC Gburg, LLC

Gothenburg, Nebraska

U.S. Department of Energy 1000 Independence Ave., SW Washington, DC 20585

-and-

Nebraska Public Power District 1414 15th Street PO Box 499 Columbus, NE 68602-0499

To Whom it May Concern:

The Meadowlark project has surpassed the phase where letters of commitment are generally considered useful; i.e. Meadowlark has fully vested investors and is negotiation – or already entered into – functional agreements with the various partners and stakeholders necessary to complete the project. JWC Gburg LLC is likewise committing the resources to the proposed project as specified in our Meadowlark proposal and is committed to work in partnership with the MCH2 Hub to make sure the project happens as the details of available resources and changing circumstances inevitably arise during the course of this partnership. Thus, in lieu of letters of commitment, the following is an attestation of the commitments JWC Gburg, LLC has received for the Meadowlark project to date, which include:

- Winfield Solutions, LLC, d/b/a Winfield United has committed via a Memorandum of Understanding (MOU), to enter into a definitive agreement for the right and obligation to purchase 100% of the output produced by Meadowlark for a period of 15 years;
- Gothenburg Improvement Company (GIC) has committed to an option for JWC Gburg, LLC to purchase of the real estate for use per the Meadowlark proposal;
- Stamicarbon B.V. has committed to a licensing agreement for its urea and nitric acid processes for urea, nitric acid, UAN, and DEF production at the Meadowlark facility;
- KT-Kinetics Technology S.p.A. has committed to an engineering services agreement for Early Works (\$1.8M) and a full scope of work (\$2.0M); and
- Dawson Public Power District has provided a draft commitment to supply electric power to the Meadowlark facility.

Full copies of commitments named above are available.

Joshua 7. Westling, Manager JWC Gburg, LLC





March 24th, 2023

Office of Clean Energy Demonstrations U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585 Via email: H2Hubs@hq.doe.gov

Subject: Letter of Commitment for the Bipartisan Infrastructure Law (BIL) Additional Clean Hydrogen Programs (Section 40314): Regional Clean Hydrogen Hubs Funding Opportunity Announcement (FOA) Number: DE-FOA-0002779

Verbio North America, LLC (Verbio) and Avangrid Renewables, LLC (Avangrid) are submitting this Letter of Commitment to support the Nebraska Public Power Authority's (NPPA) Mid-Continent Clean Hydrogen Hub grant application through the U.S. Department of Energy's (DOE) Regional Clean Hydrogen Hubs Program (DE-FOA-0002779).

As outlined in the proposal documentation Verbio and Avangrid are working together to codevelop the Synthetic Fuels from Green H2 and CCU of Biological CO2 Project, which seeks to receive grant money for a 140 MW green hydrogen production facility with capacity for at least 17,000 Mtpa.

Verbio is a globally leading innovative Biorefinery producing industrial scale Renewable Natural Gas (RNG) from agricultural residues such as biomass 'Corn Stover' and the wastewater 'Ethanol Stillage' in symbiosis with its Bioethanol production. Our goal is to utilize and reuse all the byproducts and waste from our combined ethanol and biogas production in a sustainable and environmentally friendly way. Verbio' s goal is capturing and utilizing the produced carbon dioxide (CO2) rather than storing/sequestering the CO2 from the biorefinery in CO2-pipelines which are heavily opposed by the communities in Iowa. Verbio will be utilizing CO2 and producing Synthetic Fuels as a new additional product by adding the Green Hydrogen (eH2) produced at our biorefinery located between the cities of Nevada and Ames in Iowa.

Avangrid Renewables, LLC is one of the three largest renewable energy companies in the U.S. with operations in 23 states and more than 8,500 megawatts of wind and solar generation capacity. Avangrid is deeply experienced in the development, execution and operation of renewable energy projects including battery storage, solar and offshore and onshore wind projects. Avangrid is leveraging its experience and financial strength to advance green hydrogen projects across the U.S.

As intended subrecipients in this project, Verbio and Avangrid are committed to satisfy the requirement of at least a 50/50 grant to non-federal cost share and to the following:

- Assisting NPPA in responding to DOE reviewer comments to the grant application after submission and during the pre-selection phase
- Supporting NPPA during the award negotiation phase by participating in meetings and providing additional information that may be required
- Negotiating and entering into a Subrecipient Grant Agreement with NPPA during Phase 1
- Supporting NPPA during the execution of the grant (Hub implementation) by providing information/reporting, participating in meetings, and interacting with DOE and allowing them periodic access to the project site

Sincerely,

### Verbio North America, LLC

Alicia Webber

Name Alicia Webber Title Treasurer Tel (866) 306- 4777 Ext 1150 Email: alicia.webber@verbio.us By:

Adolfo Jose Rivera Lopez Sr. Director - Green Hydrogen Tel: (475) 306 5532 adolfo.rivera@avangrid.com

**AVANGRID RENEWABLES, LLC** 

By:



April 4, 2023

The Honorable Jennifer Granholm Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

Greenfield Nitrogen, LLC (Greenfield) is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) formed by the states of Nebraska, Iowa, and Missouri.

Greenfield is an early-stage company, which is based in Garner, Iowa, and is building one of the first industrial-sized green hydrogen and green ammonia facilities in the Midwest. Greenfield's owners include farmers and individuals who have a significant stake in the success of this project. Collectively, we have invested \$7.7 million to develop the Garner facility. The Garner region is a significant farming area with a population of approximately 30,000. Given our area's close proximity to several designated disadvantaged communities, Greenfield's facility will provide many benefits to these citizens, including employment as well as improved economic opportunities through Greenfield's community benefits program.

Since the creation of the MCH2, Greenfield has worked closely with the State of Iowa, NPPD and all participants to determine the best way to leverage each of our existing strengths, including partnering with each other when feasible. For example, Greenfield will produce excess hydrogen that can support local green hydrogen users. Moreover, since ammonia is widely recognized as an optimal carrier of hydrogen, Greenfield's ammonia can be transported and broken back into green hydrogen at other end users' facilities. Further, Greenfield has the opportunity to utilize a well-established ammonia distribution system, which is ideal for both conventional and green ammonia.

If NPPD receives the full award, Greenfield is committed to providing matching funds in the amount of \$1,058,582,425 for the Garner facility. In addition, Greenfield will contribute its management team for any needed resources and assistance to further develop the MCH2.

Greenfield also will utilize its existing network of farmers, agricultural businesses, local union labor leaders, suppliers and investors to provide support. Further, Greenfield will take proactive steps to build community coalitions that promote greater diversity and inclusion and create more robust environmental stewardship.

Page Two April 4, 2023

Greenfield is pleased to participate in the MCH2 with NPPD and we cannot think of a better way to support the transition to the green economy in an agricultural-based region that will significantly benefit from this program.

x Sinda 12

Linda Thrasher President



To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

On behalf of Ideal Energy LLC, I am pleased to provide this letter expressing our organization's commitment to support Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

To support the success of the proposed goals, objectives, and outcomes of the Hydrogen Hubs Grant, Ideal Energy will develop the Ideal Fuels project – a clean hydrogen production facility and network of clean hydrogen fueling stations. Ideal Energy intends to contribute the following resources to this project: staff resources; renewable solar energy generation design expertise; engineering, procurement, and construction (EPC) expertise; and development expertise. Because Ideal Energy is an experienced solar EPC, we intend to develop solar generation assets for the proposed clean hydrogen production facility.

Ideal Energy has secured the support of a variety of project partners.

- Ideal Energy is working with BPi Inc. to finance the project. BPi is prepared to lead financing for the nonfederal portion of project funding and has sufficient resources to do so.
- Ideal Energy is working with a number of equipment manufacturers, engineering firms, and EPCs, including Nel Hydrogen, Siemens Energy, BayoTech, PDC Machines, ANGI/Gilbarco, Burns & McDonnell, Shive-Hattery, and Waldinger Corporation. Ideal Energy has procured bids, quotes, Letters of Intent, and/or engineering designs from these firms.
- Ideal Energy has partnered with Junction Hilltop Wind LLC to provide renewable wind generation for the clean hydrogen production facility.
- Ideal Energy has partnered with Tucker Freight Lines, a large Iowa-based truck transportation firm, to offtake our clean hydrogen to power fuel cell electric trucks.

We recognize the transformative potential of the Regional Clean Hydrogen Hubs Grant program. Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Troy Van Beek, CEO Ideal Energy



### UNIVERSITY OF NEBRASKA

OFFICE OF THE PRESIDENT

March 30th, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

# Re: Letter of Support for NPPD & Monolith's Mid-Continent Hydrogen Hub Community Benefits Plan

Dear Secretary Granholm:

The University of Nebraska System is pleased to provide a letter of support to Monolith Materials, Inc.'s (Monolith) Mid-Continent Hydrogen Hub (MCH2) Community Benefits Plan (CBP) as part of Nebraska Public Power District's (NPPD) application. A comprehensive and thoughtful plan developed using input from regional and local stakeholders is a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779). The University of Nebraska System is proud to support this effort.

The University of Nebraska System is Nebraska's only public university system, made of up of four campuses each with a distinct role and mission. Together the campuses enroll nearly 50,000 students, award over 11,000 degrees a year, and employ 16,000 faculty and staff who serve the state and world through education, research, and outreach.

Working with Monolith, the University of Nebraska System and our campuses have determined that the CBP closely aligns with the Department's goals and will provide tremendous benefit to Nebraska. If awarded, the University's campuses will work with MCH2 participants and the Department to develop specific goals and guidelines that closely adhere to the Regional Hydrogen Hub Community Benefits program while ensuring taxpayer funds are used efficiently with a strong return on investment.

We appreciate that the Monolith's Community Benefits Plan is driven by local input. Please consider this letter as a formal commitment from the University of Nebraska System to support this worthy effort. Thank you for the consideration this application will receive.

Ted Carta

Ted Carter President

# IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

### Office of the Vice President for Research

2610 Beardshear Hall 515 Morrill Road Ames, IA 50011-2036 515-294-1785 FAX 515-294-6100

April 3, 2023

The Honorable Jennifer Granholm Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

Iowa State University is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

When funded the Mid-Continent Clean Hydrogen Hub will transform the region by jumpstarting the hydrogen economy. The State of Iowa is at the heart of the bioeconomy of the United States. Currently, fixation of nitrogen uses ~3% of the world's energy, conversion to clean energy will have a profound impact on agriculture. As a land grant university, Iowa State University is uniquely positioned to help facilitate community benefits outreach to help ensure the hub is as successful as possible, to positively impact society.

Sincerely,

Peter K. Dorhout Vice President for Research



March 29, 2023

NEVA ESPINOZA Vice President, Energy Supply and Low-Carbon Resources

To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

### Subject: Letter of Commitment for Midcontinent Hydrogen Hub Proposal under Funding Opportunity Announcement (FOA) No. DE-FOA-0002779 "Bipartisan Infrastructure Law: Additional Clean Hydrogen Programs (Section 40314): Regional Clean Hydrogen Hubs Funding Opportunity Announcement"

Dear Madam Secretary:

The Electric Power Research Institute, Inc. (EPRI) is pleased to provide this Letter of Commitment for Nebraska Public Power District's (NPPD) application to the United States Department of Energy (DOE) for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

EPRI is a nonprofit corporation organized under the laws of the District of Columbia Nonprofit Corporation Act and recognized as a tax-exempt organization under Section 501(c)(3) of the U.S. Internal Revenue Code of 1986, as amended, and seeks involvement in furtherance of its public benefit mission. EPRI undertakes public benefit research, development, and demonstration activities with more than 450 companies in 45 countries, driving innovation to ensure the public has clean, safe, reliable, affordable, and equitable access to energy across the globe.

Subject to the conditions set forth in this letter, EPRI would work as a subrecipient on the MCH2 project. EPRI's role would be in relation to the H2Hub Network, which is a technical platform convened by EPRI for industry-level collaboration to develop and share real-time learnings, best practices, and other valuable insights across hydrogen hub development and operation. The total estimated cost of the anticipated EPRI effort, if the resultant award is fully funded, would be up to \$2.4M, of which EPRI would provide 50% in-kind cost share in an amount up to \$1.2M. The anticipated scope of EPRI work would be performed over a period of approximately 10 years under a resulting agreement.

Any potential support provided by EPRI is conditioned upon the final project plan being acceptable to EPRI and the successful negotiation of mutually acceptable contractual terms between MCH2 and EPRI. EPRI's potential support shall not be construed as an endorsement of any facility, product, or entity, as EPRI does not endorse specific facilities, companies, or products. For the avoidance of doubt, this letter may not be construed by MCH2, NPPD, DOE, EPRI, or any third party as creating any legally binding obligation.

Sincerely,

Neva Espinoza Vice President, Energy Supply and Low-Carbon Resources Electric Power Research Institute 1300 W. WT Harris Blvd. Charlotte, NC 28262

Together . . . Shaping the Future of Energy™



To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

SSAB Americas (SSAB) is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

SSAB is excited to support the MCH2 hub as an investment in the regional and national sustainable energy economy. This cooperative effort will spur not only new partnerships and investments throughout the three states, but will also lead to exciting innovation in emissions reducing technologies and job growth.

SSAB envisions hydrogen, and hydrogen derivative fuels, to be utilized as carbon free combustible energy sources for on-site process heating applications to reduce emissions in the steel making process. This technology would be the first of its kind for the steel industry and would be an example for others to follow in employing innovative hydrogen substitution practices.

In addition, SSAB is investigating the opportunity to support the development of hydrogen refueling infrastructure designed for enabling transition of the heavy haul transportation sector's conversion to fossil-free power units. This could include hydrogen storage or on-site production at the Muscatine Iowa location.

We are committed to the opportunity of partnering with NPPD and others in this region on the MCH2 hydrogen hub application. Thank you for your consideration.

Ch. X Skutt

Chuck Schmitt President, SSAB Americas





Batiment C EPFL Innovation Park Lausanne, Switzerland info@sohhytec.com

To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

SoHHytec SA/Inc is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

SoHHytec SA/Inc., a Swiss company headquartered in Lausanne, Switzerland; having operations in USA, Europe, and India, is the developer and inventor of 'Artificial Tree' technology & system for the production of green-hydrogen. SoHHytec designs, develops, builds and operates artificial gardens and forests using its proprietary artificial trees and offers green-fuel and power as service to its end customers.

With our strong focus and activities via pipeline projects in the states of Nebraska and Iowa, where distributed and on-site green-hydrogen production and its deployment has very strong potential given the matching between region's renewable resources and industrial need for green-fuel, we will like to fully support this application. Our focus is on green-hydrogen production in the most environmental and community friendly manner, specializing in not only the lowest carbon (i.e. direct solar) hydrogen production but also deploying our artificial trees with co-utilization of land and local manufacturing. The states of Nebraska, Iowa and Missouri offer one of the most suited conditions in this regard.

Sincerely, Dr. Saurabh Tembhurne, SoHHytec SA/Inc

Х CEO and Chairman

Lausanne, Switzerland, 04th April 2023

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

February 28, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from **Tucker Equipment LLC** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC**.

Tucker Equipment and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Tucker Equipment owns a sizeable fleet trucks and trailers which are operated by Tucker Freight Lines on behalf of customers. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network, which is expected to begin delivering clean, renewable hydrogen at designated fueling stations in Q1 2027.

Tucker Equipment would like to express its interest in working with Ideal Energy to collaborate in the design and execution of an equity partnership that will launch a fleet of long-haul hydrogen fuel cell electric trucks (FCETs), contingent upon Ideal Energy's successful Hydrogen Hub application and receipt of award funding, with the following general terms:

- The estimated value of Ideal Energy's contribution is \$15,000,000;
- This equity contribution from Ideal Energy will be allocated towards the procurement of 50 FCETs, and will be contingent upon the availability and application of matching funds from Tucker Equipment originating from non-federal sources;
- Ideal Energy remains open to the option of leveraging this equity contribution towards increasing the fleet size beyond 50 FCETs;
- These FCETs will be prioritized to serve customers and fleet operations within the state of Iowa;
- This fleet of FCETs will be fueled by the network of renewable, clean hydrogen fueling stations that Ideal Energy will deploy across Iowa and the region.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the long-haul truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Jordan Pape Chief Sustainability Officer, Tucker Freight Lines

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

February 28, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from **Tucker Freight Lines** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC**.

Tucker Freight Lines and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Tucker Freight Lines operates a fleet of nearly 300 trucks and 1200 trailers on behalf of customers, and seeks to decarbonize part of these fleet operations. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network, which is expected to begin delivering clean, renewable hydrogen at designated fueling stations in Q1 2027.

Tucker Freight would like to express its interest in working with Ideal Energy to:

- To enter into a partnership agreement with the goal of providing a clean hydrogen supply and offtake guarantee for the purpose of powering a fleet of up to 50 long-haul trucks;
- To offer key input on the design and deployment of a network of fueling stations that will service said fleet of trucks. The initial phase of the network will be Iowa-centric, though a regional expansion could be part of future phases. The first fueling station will be located in the Quad Cities area;
- To engage in discussions to project the minimum yearly consumption of clean hydrogen per year for the first five years; and
- To form an offtake agreement which will include a preferential cost structure of clean hydrogen per kilogram at the point-of-sale.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the long-haul truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Jordan Pape Chief Sustainability Officer, Tucker Freight Lines

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

February 28, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from the **Weaver Family** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC.** 

The Weaver Family and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. The Weaver Family owns property with characteristics advantageous for hydrogen production, including proximity to existing wind farms and power substations, sufficient acreage for solar energy generation, and an excellent location for a hydrogen production plant. Ideal Energy is developing the **Ideal Fuels** hydrogen production and hydrogen fueling station network, which is expected to begin producing and delivering clean, renewable hydrogen in Q1 2027.

The Weaver Family would like to express its interest in working with Ideal Energy to enter into a partnership agreement that will result in the construction and commissioning of a renewable, clean hydrogen manufacturing facility at the Weaver property.

- The proposed manufacturing facility site is owned by Gary and Mary Weaver on land located to the west of the Louis Dreyfus Ethanol Plant.
- The hydrogen production facility will be built in two stages, with Stage 1 expected to produce 2,000 kg hydrogen / day and Stage 2 expected to produce 10,000 kg hydrogen / day. This facility is designed to be powered by a combination of wind, solar, and utility-grid power. Engineering designs of the plant can be found in Appendix 1 of this LOI.
- Five (5) acres will be sold to Ideal Fuels LLC to be used for the manufacturing facility. The sale will occur at the time of financial closing for this project. The suitability of this land for this project will be assessed by Q4 2023.
- In addition, the project will include a solar array of up to 16.875 MW sited on approximately 85 acres adjacent to the hydrogen production facility. The construction and commissioning of this solar array may take place in phases. The proposed solar array site at this location is owned by Gary and Mary Weaver.
- Approximately 85 acres will be used by the solar array, and these acres will be leased to Ideal Fuels LLC for a period of 25 years as part of this agreement at the time of financial closing for this project.
- The hydrogen production plant's remaining energy needs will be provided by the Junction Hilltop Wind Farm and/or additional new wind turbines, as well as grid electricity.
- Appropriate access to the hydrogen production plant and solar array will also be provided via easements or other similar agreements.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the long-haul truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Gary & Mary Weaver David Weaver Theresa Weaver-Basye Owners, Weaver Family Farm

Weaver

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Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

March 2, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from **Greenfield Nitrogen LLC** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC**.

Greenfield Nitrogen and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Greenfield Nitrogen is developing a large renewable, clean hydrogen production facility. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network.

Greenfield Nitrogen would like to express its interest in working with Ideal Energy to explore a partnership agreement with the goal of providing green hydrogen and/or green ammonia for the Ideal Fuels hydrogen fuel station network.

- The off taker will be Ideal Fuels which is developing the first network of hydrogen fueling stations in the State of Iowa.
- The projected start of the offtake is the second half of 2026.
- The offtake partnership will be based on the following green hydrogen needs:

Year	Annual Needs – kg h₂	Equivalent Green Ammonia Metric Tons (assumes 85% efficiency)
2026	884,000	6,000
2027	1,386,667	9,300
2028	2,426,667	16,300
2029	3,293,333	22,000
2030	3,293,333	22,000
2031	3,293,333	22,000

- The pricing structures to explore, including escalators, will contain optionality for:
  - Delivery to the point-of-sale, at 100 miles, 150 miles, and 200 miles from the Greenfield Nitrogen plant.
  - Greenfield will provide green hydrogen and/or green ammonia.
  - Greenfield and Ideal Energy will work together to minimize the transportation carbon footprint by exploring swaps with grey hydrogen/ammonia producers.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel.

Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Linda Thrasher President Greenfield Nitrogen, LLC

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

March 1, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from **BPi** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC.** 

BPi and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Bpi has the expertise and capacity to lead project financing. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network, which is expected to begin producing and delivering clean, renewable hydrogen in Q1 2027.

BPi would like to express its interest in working with Ideal Energy to develop project financing for Ideal Fuels in the following areas:

- BPI and Ideal Energy will explore joint opportunities to further develop the commercial value of the Ideal Fuels transport network;
- BPI is exploring to lead the financing both for the production and distribution of hydrogen in the Ideal Fuels network, in order to match or exceed the DoE Hydrogen Hub grant requirements; and
- BPI is exploring to lead the project development and financing of the additional renewable energy generation needs of this particular Ideal Fuels project, which will require initially at least 17 MW in solar arrays.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the long-haul truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Barend Venter Owner & Chairman, BPi

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

March 2, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from Iowa 80 Group Inc. regarding the hydrogen fueling station project proposed by Ideal Energy LLC.

Iowa 80 Group and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Iowa 80 Group owns the **Iowa 80 Truck Stop**, as well as other trucking industry businesses. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network.

Iowa 80 Group would like to express its interest in working with Ideal Energy to:

- Deploy hydrogen fuel station infrastructure at the Iowa 80 Truck Stop;
- Provide hydrogen at the pump for fuel cell electric vehicles; and
- Use renewable hydrogen provided by the proposed Ideal Fuels clean hydrogen production facility.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

### Delia Meier

Delia Meier Senior Vice President, Iowa 80 Group



### Certificate

DOCUMENT NAME

# Letter of Intent - Iowa 80 Group to Ideal Energy

DOCUMENT ID BBED5873-A77E-4F36-9B8A-A354F03AAE32

ORIGINAL CHECKSUM 4a568496236ff51970526189fa1bee1443991f7ad4f1d1a39c5dec739c754ba9

SIGNED CHECKSUM

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Delia Meier	

### History

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Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

March 2, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from SSAB regarding the hydrogen fueling stations project proposed by Ideal Energy LLC.

SSAB and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. SSAB has the expertise and capacity to lead project financing. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network, which is expected to begin producing and delivering clean, renewable hydrogen not later than Q1 2027.

SSAB would like to express its interest in working with Ideal Energy to:

- To enter into a partnership agreement with the goal of providing a clean hydrogen supply for SSAB's transport needs;
- To offer key input on the design and deployment of a network of fueling stations that will serve the transport fleet that supports SSAB's business needs. The initial phase of the network will be Iowa-centric, though a regional expansion could be part of future phases. One of the very first fueling stations will be located in the Quad Cities area;
- To engage in discussions to project the minimum yearly needs of clean hydrogen for the transport fleet that supports SSAB business requirements;
- To form an offtake agreement which will include a preferential cost structure of clean hydrogen per kilogram at the point-of-sale.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the long-haul truck transportation market in Iowa and the region.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Dow fall

Stephen Fulton Director of Transportation SSAB



January 26, 2023

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Tom Kent,

The Nebraska Center for Energy Sciences Research (NCESR) would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

The NCESR supports basic and applied research into hydrogen technologies in all aspects of production, storage, transportation, and end-use applications. Our research is part of a larger portfolio of energy conservation and energy source creation to provide economic benefit to the citizens of the state of Nebraska and to also address broader national and global problems. Clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing greenhouse gas emissions and promoting rural and urban economic development. The NCESR shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals. We are committed to continue to supporting research into hydrogen science and technology.

This Letter of Support from the NCESR also reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

Dr. Jerry L. Hudgins, Professor and Chair





December 29, 2022

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Tom ,

The Lincoln Electric System (LES) would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which plans to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

LES is a publicly-owned municipal electric utility serving approximately 200 square miles within Lancaster County in Nebraska, including the cities and communities of Lincoln, Prairie Home, Waverly, Walton, Cheney and Emerald. LES has a long history of using innovation to meet our customer' needs while balancing high standards of reliability and cost-effectiveness with sustainability. This approach has allowed LES to reduce carbon dioxide emissions from its generation portfolio by over 40% from 2010 to 2021, with a goal to drive this to net-zero by the year 2040.

Clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing greenhouse gas emissions and promoting rural and urban economic development. LES shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals.

This Letter of Support from LES reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

Sincerely,

Kevin G. Wailes Lincoln Electric System Chief Executive Officer

9445 Rokeby Road Lincoln, NE 68526-9788



Alliant Energy 200 First Street SE P.O. Box 351 Cedar Rapids, IA 52406-0351

1-800-ALLIANT (800-255-4268) alliantenergy.com

Friday, October 1st, 2021

Greenfield Nitrogen, LLC 255 Hwy. 69, Suite 2 Garner, IA 50438

Dear Greenfield Nitrogen Management Team:

This letter confirms Greenfield Nitrogen, LLC's ("Greenfield") desire to purchase approximately 100 megawatts of competitively priced renewable electricity from Interstate Power and Light Company ("IPL") for its proposed green hydrogen / ammonia production and storage facility near Garner, Iowa.

Greenfield has informed IPL that it is partnering with Maire Tecnimont to design, develop and construct a green hydrogen / ammonia facility using an alkaline electrolysis system that will produce approximately 92,000 tons green ammonia annually (16,192 tons green hydrogen). According to Greenfield, the proposed facility is the largest dedicated green hydrogen / ammonia facility under development in Iowa and the Upper Midwest. The facility will serve both the industrial and agricultural markets as well as emerging new markets.

Given renewable electricity is the highest cost component of producing green hydrogen / ammonia, obtaining competitively priced renewable electricity is critical to Greenfield's project economics. As such, Greenfield is interested in options that would be tailored to the facilities' unique operating requirements, including its large renewable electrical load, its 24-7 operating needs as well as its ability to quickly ramp up and down, which is especially distinctive for a large manufacturing facility.

This letter does not create or commit Greenfield and IPL to a partnership, joint venture, or any other relationship. Rather, this letter confirms IPL's willingness to work with Greenfield on a mutually beneficial project that will advance emerging green hydrogen / ammonia to propel the State of Iowa as a leader in the sector.

Sincerely,

Mary Meisterling

Mary Meisterling Manager, Business Support & Development Account Management IPL



March 06, 2023

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Tom Kent,

NextEra Energy Resources would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

NextEra Energy Resources is the world's largest generator of renewable energy from the wind and sun and a world leader in battery storage. NextEra has a long history of investing in renewable infrastructure across the United States, with over 45 gigawatts of net generating capacity and more than 19 gigawatts of planned future projects in the United States.

NextEra Energy Resources and its subsidiaries have invested over \$800 MM in renewable energy infrastructure in Nebraska. NextEra has a multi-gigawatt pipeline of utility scale wind, solar, and battery storage projects that could support the production of green hydrogen for the Mid-Continent Clean Hydrogen Hub.

Clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing greenhouse gas emissions and promoting rural and urban economic development. NextEra Energy Resources shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals.

This Letter of Support from NextEra Energy Resources reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

John Di Donato National Vice President, Renewables Origination NextEra Energy Resources, LLC



March 13, 2023

Mr. Tom Kent CEO Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Mr. Kent:

The American Coalition for Ethanol (ACE) would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

ACE is a grassroots advocacy organization, powered by rural Americans from all walks of life who have built an innovative industry that delivers homegrown biofuel and food for a growing world. Our members include U.S. ethanol biorefineries, biofuel investors, farmers, and companies that supply goods and services to the U.S. ethanol industry.

Ethanol is a potential feedstock to produce clean hydrogen for multiple markets in the future, such as power generation, fuel cell grade hydrogen for transportation, and sustainable aviation fuel (SAF). Our members are focused on innovating and technology investments to reduce greenhouse gas (GHG) emissions and clean hydrogen is part of the future technology innovations they are considering.

Clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing GHG emissions and promoting rural and urban economic development. ACE shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals.

This Letter of Support from ACE reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

Brian Jennings, CEO American Coalition for Ethanol

Carlos Mayor, Managing Director Synthetic Fuels VERBIO North America 17199 N Laurel Park Dr, Suite 260 Livonia, MI 48152

March 17, 2023

Dear Mr. Mayor,

We are writing to provide a Letter of Intent from **Ideal Energy LLC** regarding clean hydrogen produced by **VERBIO North America.** 

Ideal Energy and VERBIO North America (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. VERBIO is developing a large renewable, clean hydrogen production facility. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network.

Ideal Energy would like to express its interest in working with VERBIO to explore a partnership agreement with the goal of providing green hydrogen for the Ideal Fuels hydrogen fuel station network.

- Ideal Fuels agrees to partner with VERBIO to explore the viability and commercial merits of a hydrogen and synthetic fuels dispensing station close to the VERBIO Nevada Biorefinery near Nevada, Iowa.
- Ideal Fuels agrees to partner with VERBIO in exploring an off-take agreement for Ideal Fuels to procure green hydrogen starting in 2027. Ideal Fuels estimates its needs as follows:

Year	Annual Needs – kg h <sub>2</sub>
2027	884,000
2028	1,386,667
2029	2,426,667
2030	3,293,333
2031	3,293,333
2032	3,293,333

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support VERBIO's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with VERBIO to bring clean hydrogen to the truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Troy Van Beek CEO, Ideal Energy



March 23, 2023

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

Dear Mr. Van Beek,

ITC Midwest is pleased to offer a letter of intent and support for the hydrogen fueling station project proposed by Ideal Energy LLC.

ITC Midwest and Ideal Energy have the potential to work together to bring hydrogen to market for the trucking industry. ITC Midwest is an independent electrical transmission company. Ideal Energy is developing the Ideal Fuels hydrogen production and hydrogen fueling station network, which is expected to begin producing and delivering clean, renewable hydrogen in Q1 2027.

ITC Midwest would like to express our interest in working with Ideal Energy to provide electrical transmission to the Ideal Fuels clean hydrogen production facility.

- ITC Midwest agrees to explore opportunities to develop and optimize the transmission infrastructure needed to supply electricity to the Ideal Fuels production facility from nearby wind generation, on-site solar generation, and grid power.
- The project site location in Greene County, Iowa, is expected to require power of 28-30 MW at peak demand. Power will be provided by approximately 17.5 MW of on-site solar, 26.25 MW of nearby wind (8 MW of existing), and grid power.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel. Supporting its development will help decarbonize supply chains and benefit Iowa's people and trucking and truck stop industries. Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the truck transportation market in Iowa.

Dusky Terry President, ITC Midwest





Telephone (402) 895-2202 (Petroleum) Telephone (402) 895-7038 (Travel Centers) 9915 S. 148<sup>th</sup> Street, Omaha, NE 68138 www.sappbros.net

March 24, 2023

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Tom,

Sapp Bros., Inc. would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

Sapp Bros. has a long history of long history of trying and retailing new transportation energies like ethanol, biodiesel, CNG, and automotive propane. We believe Hydrogen will have a meaningful and growing role in transportation energy space moving forward.

Clean hydrogen has the potential to advance the interests of the MCH2 regional States in clean air, reduction of greenhouse gas emissions, jobs, along with rural and urban economic development. Sapp Bros., Inc. shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals.

This Letter of Support from Sapp Bros., Inc. reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

Sincerely.

Andrew Richard

CEO Sapp Bros., Inc.



March 24, 2023 Mr. Tom Kent/CEO Nebraska Public Power District Mid-Continent Clean Hydrogen (MCH2)/Nebraska LB 1099 Committee Chair

RE: Letter of Support for Mid Continent Clean Hydrogen Hub (MCH2)

Dear Mr. Kent,

Please find this letter as a record of Cubby's Convenience Stores full support of the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub Law 117-58 (Act).

As a fuel retailer operating in Nebraska, Iowa, and South Dakota, Cubby's has always tried to be forward looking and thinking about alternative blends of both gasoline and diesel. We currently offer higher blends of ethanol and biodiesel at many of our locations. We are currently in the process of partnering with Nebraska Public Power District in offering electric charging stations at our O'Neill, NE location.

We believe that clean hydrogen has the potential as an alternative source of energy with large over the road trucks. By supporting the MCHS regional hub we believe that benefits will flow to our trade area in terms of a cleaner environment along with economic development opportunities.

This letter of support from Cubby's Convenience Store demonstrates our intent to support policies, incentives, and plans that could be leveraged to support a robust hydrogen hub and market. We look forward to offering support of MCH2 efforts.

De Lone Wilson

President Cubby's, Inc.



Alliant Energy 200 First Street SE P.O. Box 351 Cedar Rapids, IA 52406-0351

1-800-ALLIANT (800-255-4268) alliantenergy.com

March 28, 2023

**Carlos Mayer** Managing Director Synthetic Fuels

VERBIO North America 9 W Broad Street Suite 100 Stamford, CT 06902

Dear Mr. Mayer:

Alliant Energy is pleased to offer this letter of support for the hydrogen project proposed by Verbio.

Alliant Energy and Verbio have an established and valued working relationship with your current operations of producing Renewable Natural Gas (RNG) in Nevada, Iowa and are we are very excited to support your plant expansion to include the production and use of hydrogen to significantly further your RNG output.

We understand that Verbio plans to begin producing and using clean, renewable hydrogen in as early as 2024.

We also recognize the transformative potential of the Regional Clean Hydrogen Hub program implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Verbio's participation in MCH2.

Clean hydrogen has the potential to benefit lowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Supporting its development will help decarbonize supply chains and benefit lowa's people and industries.

We look forward to the US-DOE's decision to fund MCH2 and directly benefit Verbio's expansion plans.

Sincerely,

Dennis E. Jordan, MBA Director of Customer, Community & Economic Development

Alliant Energy 200 1<sup>st</sup> Street SE | Cedar Rapids, IA 52401 Cell: (319) 270-5086 | <u>alliantenergy.com</u> DennisJordan@alliantenergy.com



Nebraska Indian Community College Office of the President Macy Campus P.O. Box 428 • Macy, Nebraska 68039 (402) 960-5176 • moltrogge@thenicc.edu

March 22, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

### Re: Letter of Support for NPPD & Monolith's Mid-Continent Hydrogen Hub Community Benefits Plan

Dear Secretary Granholm:

Nebraska Indian Community College is pleased to provide a letter of support to the Mid-Continent Hydrogen Hub's (MCH2) Community Benefits Plan led by Nebraska Public Power District (NPPD) and Monolith Materials, Inc. (Monolith). A comprehensive and thoughtful plan developed using input from regional and local stakeholders is a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779).

The Nebraska Indian Community College is an accredited two year Tribal College and a 1994 Land Grant Institution. We are charted to serve the Umo<sup>n</sup>ho<sup>n</sup> and Santee Dakota people and other learners. We have been offering higher education and adult basic education programming since 1973. Currently NICC has locations in Macy, Nebraska on the Umo<sup>n</sup>ho<sup>n</sup> Reservation, in Santee on the and Santee Dakota Reservation, an urban location in South Sioux City, and an additional location in Pawnee, OK. We also have the majority of our degree programs approved for distance education offerings.

Our leadership has identified several areas of alignment with the Department's goals where investment will provide tangible, long-lasting benefits. Initial ideas identified include enhancement of water infrastructure, additional K-12 and postsecondary educational opportunities for area students, and the easement of the energy burden shouldered by families in our community. If awarded, the Nebraska Indian Community College will work with MCH2 participants and the Department to produce a program aimed at maximizing local, long-term benefit for our community through partnership and collaboration. Specific goals and guidelines will be determined in close partnership with MCH2 participants and the Department to ensure close adherence to the goals and stated objectives of the Department's Clean Hydrogen Hub program.

We appreciate that the MCH2 Community Benefits Plan is driven by local input. Please consider this letter as a formal commitment from the Nebraska Indian Community College to work collaboratively with NPPD, Monolith, and the Department to aid in the development and execution of a locally driven plan to benefit of Northeast Nebraska. Thank you for the consideration the MCH2 application will receive.

Respectfully,

Michael Oltrogge, Ph.D. President Nebraska Indian Community College



March 28, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

### Re: Letter of Support for NPPD & Monolith's Mid-Continent Hydrogen Hub Community Benefits Plan

### Dear Secretary Granholm:

Beyond School Bells is pleased to provide a letter of support to Monolith Materials, Inc.'s (Monolith) Mid-Continent Hydrogen Hub (MCH2) Community Benefits Plan (CBP) as part of Nebraska Public Power District's (NPPD) application. A comprehensive and thoughtful plan developed using input from regional and local stakeholders is a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779). Beyond School Bells is proud to support this effort.

Beyond School Bells (BSB), a program of the Nebraska Children and Families Foundation, is Nebraska's statewide afterschool and summer learning network. We collaborate closely with the Nebraska Department of Education (NDE) and urban and rural schools and communities across the state to support high quality, engaging afterschool and summer learning experiences that complement and expand on school day learning. Our work focuses on schools serving low-income youth, with the understanding that our persistent educational achievement gaps reflect an out of school time opportunity gap between students from different socio-economic backgrounds, including our partner community Crete, which is near Monolith's facility. One of the emerging areas of interest in our work at BSB, facilitated by our role in helping NDE administer \$11 million in Federal ESSER III funding, is supporting the development of new, cutting-edge afterschool and summer learning experiences that are STEM-rich and provide Nebraska youth with hands on introductions to the careers and technologies that will drive Nebraska's future growth. As such, the MCH2 project and the introduction it will provide to clean hydrogen and careers in the growing hydrogen fuel sector is a fantastic opportunity for us to leverage our statewide reach and focus on educational equity and excellence.

Working with Monolith, Beyond School Bells has determined that the CBP closely aligns with the Department's goals and will provide tremendous benefit to Nebraska. If awarded, BSB will work with MCH2 participants and the Department to develop specific goals and guidelines that closely adhere to the Regional Hydrogen Hub Community Benefits program while ensuring taxpayer funds are used efficiently with a strong return on investment.

We appreciate that the Monolith's Community Benefits Plan is driven by local input. Please consider this letter as a formal commitment from Beyond School Bells to support this worthy effort. Thank you for the consideration this application will receive.

Jeff Cole

Jeff Cole Vice President Beyond School Bells Nebraska Children and Families





Carl Dickinson Chief Executive Officer Central Valley Ag 2803 N Nebraska Ave, York, NE 68467

March 3, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: Letter of Support for Monolith Materials LLC in its participation in the Mid-Continent Clean Hydrogen Hub

Dear Secretary Granholm:

Central Valley Ag is pleased to provide a letter of support for Monolith Materials LLC (Monolith) and its participation in the Mid-Continent Clean Hydrogen Hub submittal to the Regional Clean Hydrogen Hubs Funding Opportunity Announcement Number DE-FOA-00027779. Central Valley Ag is interested in the offtake of clean ammonia from Monolith's Facility under development in Hallam, Nebraska, which is an integral project in the hydrogen network.

Clean ammonia is an essential commodity for a sustainable future. Its consumption is expected to expand beyond fertilizer production and current industrial applications to hard-to-abate sectors like transportation and power generation, which will positively contribute to the nation's decarbonization goals.

Central Valley Ag is a farmer-owned cooperative in Iowa, Kansas, and Nebraska. CVA is an innovative leader providing products and services in grain, agronomy, feed, and energy. At Central Valley Ag, we take our mission seriously. Every single day we aspire to provide innovative solutions that bring value to you, our customers. The agricultural world is changing all around us, and we must look toward the future to continue to provide the best agronomy, energy, feed and grain products and services.

Central Valley Ag hereby confirms its interest in engaging Monolith for offtake of clean ammonia from Monolith's Facility in Hallam, Nebraska. We believe supporting the development of this project will increase the adoption of clean hydrogen products in both existing and hard-to-abate sectors and expand growth opportunities for the businesses, communities and people in the region.

Sincerely,

Carl B. Dickinson President/CEO



March 28, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

### Re: Letter of Support for NPPD & Monolith's Mid-Continent Hydrogen Hub Community Benefits Plan

Dear Secretary Granholm:

The Daugherty Water for Food Global Institute at the University of Nebraska is pleased to provide a letter of support to Monolith Materials, Inc.'s (Monolith) Mid-Continent Hydrogen Hub (MCH2) Community Benefits Plan (CBP) as part of Nebraska Public Power District's (NPPD) application. A comprehensive and thoughtful plan developed using input from regional and local stakeholders is a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779). The Institute is proud to support this effort.

Since 2010, the Daugherty Water for Food Global Institute has worked toward one goal: a food and water secure world. We help farmers everywhere increase production while using water more effectively, and contribute scientific and policy research that informs decision-making and educates future leaders.

Working with Monolith, the Daugherty Water for Food Global Institute has determined that the CBP closely aligns with the Department's goals and will provide tremendous benefit to Nebraska. If awarded, the the Daugherty Water for Food Global Institute will work with MCH2 participants and the Department to develop specific goals and guidelines that closely adhere to the Regional Hydrogen Hub Community Benefits program while ensuring taxpayer funds are used efficiently with a strong return on investment.

We appreciate that Monolith's Community Benefits Plan is driven by local input. Please consider this letter as a formal commitment from the Institute to support this worthy effort. Thank you for the consideration this application will receive.

Sincerely,

2B.L.I

Peter G. McCornick, Ph.D., P.E., D.WRE Executive Director, Daugherty Water for Food Global Institute



Daugherty Water for Food Global Institute 2021 Transformation Drive, Suite 3220 | Lincoln, NE 68588-6203 | 402.472.5145 | <u>waterforfood@nebraska.edu</u> waterforfood.nebraska.edu



March 27, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: Letter of Support for Monolith Materials LLC in its participation in the Mid-Continent Clean Hydrogen Hub

Dear Secretary Granholm:

Farmers Cooperative of Dorchester Inc. (Farmers Cooperative) is pleased to provide a letter of support for Monolith Materials LLC (Monolith) and its participation in the Mid-Continent Clean Hydrogen Hub submittal to the Regional Clean Hydrogen Hubs Funding Opportunity Announcement Number DE-FOA-00027779. Farmers Cooperative is interested in the offtake of clean ammonia from Monolith's Facility under development in Hallam, Nebraska, which is an integral project in the hydrogen network.

Clean ammonia is an essential commodity for a sustainable future. Its consumption is expected to expand beyond fertilizer production and current industrial applications to hard-to-abate sectors like transportation and power generation, which will positively contribute to the nation's decarbonization goals.

At Farmers Cooperative, our mission is investing in our Owners' Success; delivering service and solutions to exceed customer expectations. Our vision is to be the best; providing solutions to achieve employee and customer success. Today, Farmers Cooperative has 61 locations spread throughout southeast Nebraska and northeast Kansas to serve farmers and ranchers that feed the world with sustainable practices.

Farmers Cooperative hereby confirms its interest in engaging Monolith for offtake of clean ammonia from Monolith's Facility in Hallam, Nebraska. We believe supporting the development of this project will increase the adoption of clean hydrogen products in both existing and hard-to-abate sectors and expand growth opportunities for the businesses, communities, and people in the region.

Sincerely,

Allan Zumpfe President/CEO 402-366-3304

P.O. Box 263 • 208 W. Depot • Dorchester, Nebraska 68343-0263 Phone: 1-402-946-2211 • Toll Free: 1-800-642-6439 • Fax: 1-402-946-2062 www.farmersco-operative.com



VERBIO North America, LLC 9 West Broad St 100, Stamford CT, 06902

The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave. SW

Washington DC 20585

Carlos Mayer Managing Director - Synthetic Fuels Phone: +1 866 306 4777 x 1005 Mobile: +1 615 788 2309 <u>carlos.mayer@verbio.us</u> www.verbio.us

Stamford, CT, March 21st, 2023

# Re: Letter of Commitment to support Monolith's Mid-Continent Hydrogen Hub with Renewable Natural Gas Supply

Dear Madam Secretary:

VERBIO North America, LLC ("Verbio") is pleased to provide a letter of commitment to support Monolith's application as a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779). Verbio intends to enter supply discussions with Monolith to supply cost effective, low carbon intensity Renewable Natural Gas (RNG) to produce clean hydrogen, carbon black, and ammonia at Monolith's Olive Creek 2 (OC2) facility, Monolith's planned expansion included as part of the Mid-Continent Hydrogen Hub. The discussions memorialized in this letter outline a strong collaboration between hydrogen hub members and demonstrates both companies' goal of creating a regional network to support the Department of Energy's plan for the country's energy transition.

Through partnership with hub participants, customers in the U.S. Midwest and beyond will have enhanced access to RNG and clean materials used in industries that have been notoriously difficult to decarbonize. In fact, when Monolith utilizes RNG from livestock manure or other sources, the process has a negative carbon intensity, drawing down emissions that are already in or would have otherwise gone into the atmosphere. Monolith and Verbio's commitment to continue commercial discussions represents an incredibly unique opportunity to synergize two key projects to maximize shared decarbonization goals.

Verbio is a leading international producer of renewable energy, most recently commissioning our Nevada Biorefinery, located in Nevada, IA in December 2021. We are currently producing 7 million gallons of renewable natural gas (RNG) (EGE). Following the completion of our ethanol production upgrades in the 4<sup>th</sup> quarter of 2023 we will produce an additional 19 million of RNG (EGE) and 60 million gallons of corn-based ethanol. Using advanced processing the plant's stillage will be used as additional feedstock for the production of RNG. Adding 140 MW electrolysis to the MCH2 Hub in the future to enhance our biomethane production output synthetically by 86% will not only utilize carbon

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dioxide from the biorefinery with the green hydrogen but create a new synthetic fuel product for our customers' needs.

Verbio hereby confirms its interest in partnering with Monolith and its intention to engage Monolith in additional commercial discussions to supply renewable natural gas to their Nebraska facility. Verbio believes supporting the development of Monolith's project will increase the adoption of clean hydrogen products in both existing and hard-to-decarbonize sectors and expand growth opportunities for the businesses, communities, and people in the U.S. Midwest.

Yours faithfully,

VERBIO North America, LLC

Carles Mayer

Carlos Mayer Managing Director - Synthetic Fuels



2626 1st Ave. South | P.O. Box 818 | Fort Dodge, IA 50501

### FARMER FOCUSED. MEMBER DRIVEN.

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: Letter of Support for Monolith Materials LLC in its participation in the Mid-Continent Clean Hydrogen Hub

Dear Secretary Granholm:

NEW Cooperative Inc. is pleased to provide a letter of support for Monolith Materials LLC (Monolith) and its participation in the Mid-Continent Clean Hydrogen Hub submittal to the Regional Clean Hydrogen Hubs Funding Opportunity Announcement Number DE-FOA-00027779. NEW Cooperative Inc. is interested in the offtake of clean ammonia from Monolith's Facility under development in Hallam, Nebraska, which is an integral project in the hydrogen network.

At NEW Cooperative Inc., our mission is to add value to our members farming operations and our vision is to remain an innovative and efficient provider of today's ag markets and services in a sustainable manner to improve our grower member's ability to meet the growing demand for their grain and livestock.

Clean ammonia is an essential commodity for a sustainable future. Its consumption is expected to expand beyond fertilizer production and current industrial applications to hard-to-abate sectors like transportation and power generation, which will positively contribute to the nation's decarbonization goals.

NEW Cooperative Inc. hereby confirms its interest in engaging Monolith for offtake of clean ammonia from Monolith's Facility in Hallam, Nebraska. We believe supporting the development of this project will increase the adoption of clean hydrogen products in both existing and hard-to-abate sectors and expand growth opportunities for the businesses, communities, and people in the region.

Dan Dix CEO/General Manager





Corporate Office 3420 E. Harmony, Suite 122 Fort Collins, CO 80528 (970) 666-4100 www.novusag.com

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: Letter of Support for Monolith Materials LLC in its participation in the Mid-Continent Clean Hydrogen Hub

Dear Secretary Granholm:

Novus Ag is pleased to provide a letter of support for Monolith Materials LLC (Monolith) and its participation in the Mid-Continent Clean Hydrogen Hub submittal to the Regional Clean Hydrogen Hubs Funding Opportunity Announcement Number DE-FOA-00027779. Novus Ag is interested in the offtake of clean ammonia from Monolith's Facility under development in Hallam, Nebraska, which is an integral project in the hydrogen network.

Clean ammonia is an essential commodity for a sustainable future. Its consumption is expected to expand beyond fertilizer production and current industrial applications to hard-to-abate sectors like transportation and power generation, which will positively contribute to the nation's decarbonization goals.

Novus Ag is the back-office aggregator engine that enables local success for agricultural retailers. We are the engine behind hyperlocal agriculture. Our mission is making agriculture business better for everyone. We help people achieve independence by making it easier to start, run, and grow a business. We believe the future of agriculture commerce has more voices, not fewer, so we're reducing barriers to business ownership making the agriculture business experience better for everyone. Novus Ag's goal is to create more independent ag retailers, allowing them to exercise their entrepreneurial capabilities.

Novus Ag hereby confirms its interest in engaging Monolith for offtake of clean ammonia from Monolith's Facility in Hallam, Nebraska. We believe supporting the development of this project will increase the adoption of clean hydrogen products in both existing and hard-to-abate sectors and expand growth opportunities for the businesses, communities and people in the region.

Z#1

Thomas E. Warner II President & CEO +1 (309) 221-8177 tommy.warner@novusag.com



Larry Lloyd Director State Government Affairs 11306 Franklin Avenue Franklin Park, IL USA 60131 E larry\_lloyd@cpr.ca P (224) 373-1746

March 31, 2023

To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

RE: Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779)

Dear Secretary Granholm:

Canadian Pacific Railway Company (CP) through its U.S. subsideraries (the Soo Line Railroad, the Dakota, Minnesota & Eastern Railroad, the Delaware & Hudson Railway, and the Central Maine & Quebec Railway) is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

CP provides rail and intermodal transportation services across an approximately 13,000-mile network, servicing major centers in Canada and the U.S. Our industry-leading transportation services and supply chain solutions are a vital service for the North American economy, ensuring the efficient and reliable movement of goods and commodities. CP's network includes extensive infrastructure and rail operations within the MCH2 project area states of Iowa and Missouri.

In 2020, CP launched our Hydrogen Locomotive Program aiming to develop North America's first line-haul hydrogen-powered locomotive. This program started with retrofitting a line-haul locomotive with hydrogen fuel cells and battery technology to drive the locomotive's electric traction motors. In the fall of 2022, CP conducted our first revenue service test for this locomotive, CP 1001. The Hydrogen Locomotive Program has grown to now have a second hydrogen locomotive, CP 1002, in active testing while a third is in fabrication. This Program has the potential to significantly reduce greenhouse gas emissions from locomotive operations, supporting CP's Climate Change Commitments and the transition to a low-carbon future in the freight rail sector.

CP supports the application of NPPD to establish the MCH2 hub. Investment in hydrogen production, distribution and final use infrastructure is critical to the expansion of clean hydrogen for a future low carbon global economy. As the Hydrogen Locomotive Program continues to expand, CP will require access to clean hydrogen fuel to support our rail operations and customer services requirements within the MCH2 area. Successful commercialization of hydrogen based rail transportation in the Midwest will require production and distribution of hydrogen. Department of Energy support for the development of the MCH2 will help provide this necessary infrastructure.

If you have any questions regarding our support, please feel free to contact myself and my colleague Mr. David Huck, Director, Sustainability, at (403) 319-6466 or by email at David\_Huck@cpr.ca

Jamil

Larry Lloyd Director of State Government Affairs Canadian Pacific



COLLEGE OF PUBLIC HEALTH Department of Environmental, Agricultural, and Occupational Health

March 31, 2023

The Honorable Jennifer M. Granholm, Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

# Re: Letter of Support for NPPD & Monolith's Mid-Continent Hydrogen Hub Community Benefits Plan

Dear Secretary Granholm:

The Water, Climate and Health Program (WCHP) at the University of Nebraska Medical Center is pleased to provide a letter of support to Monolith Materials, Inc.'s (Monolith) Mid-Continent Hydrogen Hub (MCH2) Community Benefits Plan (CBP) as part of Nebraska Public Power District's (NPPD) application. A comprehensive and thoughtful plan developed using input from regional and local stakeholders is a critical component of the Mid-Continent Hydrogen Hub, *BIL: Regional Clean Hydrogen Hubs* (DE-FOA-0002779). The WCHP is proud to support this effort.

Housed in the UNMC College of Public Health Department of Environmental, Agricultural & Occupational Health, the WCHP brings together experts from UNMC, the Institute of Agriculture and Natural Resources and the Robert B. Daugherty Water for Food Global Institute at the University of Nebraska to address Nebraska's most pressing public health issues related to water and climate. The program pioneers interdisciplinary research, education and collaborative solutions to public health challenges associated with water and climate in Nebraska and around the world.

Working with Monolith, the WCHP has determined that the CBP closely aligns with the Department's goals and will provide tremendous benefit to Nebraska. If awarded, the WCHP will work with MCH2 participants and the Department to develop specific goals and guidelines that closely adhere to the Regional Hydrogen Hub Community Benefits program while ensuring taxpayer funds are used efficiently with a strong return on investment.

We appreciate that the Monolith's Community Benefits Plan is driven by local input. Please consider this letter as a formal commitment from the WCHP to support this worthy effort. Thank you for the consideration this application will receive.

Pope E.

Jesse E. Bell, Ph.D.

Claire M. Hubbard Professor of Water, Climate and Health Director of Water, Climate and Health Program Director of Water, Climate and Health at Daugherty Water for Food Global Institute

### STATE OF NEBRASKA

**OIL AND GAS CONSERVATION COMMISSION** 

PO BOX 399 SIDNEY, NEBRASKA 69162-0399 (308) 254-6919 Fax (308) 254-6922 www.nogcc.ne.gov JOHN RUNDEL COMMISSIONER

PAUL STROMMEN COMMISSIONER

DALLEN JUELFS

STAN BELIEU

December 2, 2022

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Mr. Kent:

Nebraska Oil and Gas Conservation Commission (NOGCC) would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

As the agency that regulates oil, gas and carbon sequestration in the state of Nebraska, we are very interested in responsible energy development and deployment that serves the future needs of our citizens while protecting our environment.

We realize that clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing greenhouse gas emissions and promoting rural and urban economic development. NOGCC shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance in the individual and regional collective goals.

This Letter of Support from NOGCC reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We hope to continue to provide input into this process that can form a stable regulatory environment. We look forward to working with our sister agencies in Nebraska and our partnering states to support the MCH2 efforts.

Sincerely,

NEBRASKA OIL AND GAS CONSERVATION COMMISSION

Stan Belieu

Stan Belieu Director



To: The Honorable Jennifer Granholm, Secretary of Energy United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Madam Secretary,

OCI Global is pleased to support Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) and respectfully encourage that it be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

As background, OCI developed the OCI Nitrogen Iowa plant (formerly known as Iowa Fertilizer Company), which is the first world-scale greenfield nitrogen fertilizer facility built in the United States in the past 30 years. During construction, the company invested \$3 billion and employed 3,500 to build the facility. Production at the plant began in April 2017 and since that time the company has produced 1.7 million to 2.2 million tons of fertilizer products every year. As a result, farmers in Iowa and throughout the Midwest have greater access to a more stable source of fertilizer products such as urea ammonium nitrate, granular urea, and ammonia. Additionally, our facility produces diesel exhaust fluid that is critical to reducing greenhouse gas emissions created from diesel engines. Our facility currently employs more than 260 people full-time and is permitted to be the most environmentally friendly fertilizer plant operating in the United States.

OCI is committed to the sustainability of our operations and plan to make major investments in the years to come to ensure we meet the following goals:

- Decarbonization: Reducing greenhouse gas emissions through increased use of renewable energy and sustainable sources, operational excellence in energy efficiency, and utilization of carbon capture and sequestration. OCI plans to reach carbon neutrality by 2050.
- Providing for Sustainable Agriculture: Feeding the world sustainability through lower carbon fertilizers and farmer support and education.
- Cleaner Products and Transportation: Powering cleaner transport and industry through renewable and low carbon fuels for transport, shipping, and power generation,

producing low carbon products and solutions to reduce environmental and social impacts.

Simply put, hydrogen is critical to achieving all of these goals.

If Iowa, Nebraska, and Missouri are able to provide greater sources of hydrogen locally, OCI will seriously consider directing planned future investments into this region. That would likely include a major expansion of our operations and capabilities in in this Midwest region and in doing so we would play a critical role in creating a more direct and efficient pathway to sectors such as agriculture, transportation, and manufacturing to reach net zero. While a new project or expansion is not imminent today, establishing Iowa, Missouri, and Nebraska as a Regional Clean Hydrogen Hub increases the prospects of such an investment exponentially. Similar to our initial investment to build the plant in Wever, we anticipate this would involve a major capital investment with significant employment levels both during construction and operations, and once complete, the ability to improve environmental outcomes to an even greater degree.

Thank you in advance for your consideration of our recommendation and the overall application. If you have any questions at all, please do not hesitate to get in touch with us using the contact information below.

Sincerely,

Craig Pulver Director Business Development & Investments OCI Global

Troy Van Beek, CEO Ideal Energy 602 N 6th Street Fairfield, IA 52556

March 2, 2023

Dear Mr. Van Beek,

We are writing to provide a Letter of Intent from **Greenfield Nitrogen LLC** regarding the hydrogen fueling station project proposed by **Ideal Energy LLC**.

Greenfield Nitrogen and Ideal Energy (the Parties) have the potential to work together to bring hydrogen to market for the trucking industry. Greenfield Nitrogen is developing a large renewable, clean hydrogen production facility. Ideal Energy is developing the **Ideal Fuels** hydrogen fueling station network.

Greenfield Nitrogen would like to express its interest in working with Ideal Energy to explore a partnership agreement with the goal of providing green hydrogen and/or green ammonia for the Ideal Fuels hydrogen fuel station network.

- The off taker will be Ideal Fuels which is developing the first network of hydrogen fueling stations in the State of Iowa.
- The projected start of the offtake is the second half of 2026.
- The offtake partnership will be based on the following green hydrogen needs:

Year	Annual Needs – kg h₂	Equivalent Green Ammonia Metric Tons ( <u>assumes</u> 85% efficiency)
2026	884,000	6,000
2027	1,386,667	9,300
2028	2,426,667	16,300
2029	3,293,333	22,000
2030	3,293,333	22,000
2031	3,293,333	22,000

- The pricing structures to explore, including escalators, will contain optionality for:
  - Delivery to the point-of-sale, at 100 miles, 150 miles, and 200 miles from the Greenfield Nitrogen plant.
  - Greenfield will provide green hydrogen and/or green ammonia.
  - Greenfield and Ideal Energy will work together to minimize the transportation carbon footprint by exploring swaps with grey hydrogen/ammonia producers.

We recognize the transformative potential of the Regional Clean Hydrogen Hub program (Hydrogen Hub Program) implemented by the 2021 Infrastructure Investment and Jobs Act. Furthermore, we support Iowa's participation in the Mid-Continent Clean Hydrogen Hub (MCH2), which is applying to the Hydrogen Hub Program, and we support Ideal Energy's participation in MCH2.

Clean hydrogen has the potential to benefit Iowa with clean air, reduced greenhouse gas emissions, new clean energy jobs, and rural and urban economic development. Clean hydrogen promises to be a key transportation fuel.

Supporting its development will help decarbonize supply chains and will benefit Iowa's people and trucking and truck stop industries.

Therefore, we wish to collaborate with Ideal Energy to bring clean hydrogen to the truck transportation market in Iowa.

This Letter of Intent is non-binding on both Parties, and does not commit either Party to any contractual agreement or partnership, but rather signals intent to pursue a mutually agreeable arrangement to provide clean hydrogen to the trucking industry.

Linda Thrasher President Greenfield Nitrogen, LLC



March 3, 2023

Tom Kent CEO, Nebraska Public Power District (NPPD) Mid-Continent Clean Hydrogen (MCH2)/ Nebraska LB 1099 Committee Chair

### Re: Letter of Support for Mid-continent Clean Hydrogen Hub (MCH2)

Dear Tom Kent,

On behalf of Tallgrass MLP Operations, LLC and its subsidiaries ("Tallgrass") would like to express our support for the Mid-Continent Clean Hydrogen Hub (MCH2) which is looking to include the states of Nebraska, Iowa, and Missouri as contemplated by the 2021 Infrastructure Investment and Jobs Act, Pub. Law 117-58 (Act).

Tallgrass is a portfolio company within Blackstone infrastructure Partners and is an established midstream operator with a long history of providing critical energy logistics services to communities in Nebraska and its neighboring states. Tallgrass currently owns and operates more than 9,000 miles of natural gas, oil and water pipelines and more than 200,000 hp worth of mainline compression and pumps for natural gas and oil transportation. Tallgrass also owns saltwater disposal wells, natural gas storage facilities and natural gas processing.

Tallgrass is currently working on various Hydrogen initiatives as demonstrated by our involvement in the Black Hills Energy Wyoming Energy Authority Hydrogen burn project, Escalante power plant Hydrogen conversion, and DOE Blue Bison Auto Thermal Reformer Carbon Capture project.

Clean hydrogen has the potential to advance the interests of the MCH2 regional States by reducing greenhouse gas emissions and promoting rural and urban economic development. Tallgrass shares a mutual interest in the demonstration and growth of clean hydrogen production, transport, and utilization together to advance our individual and regional collective goals.

This Letter of Support from Tallgrass reflects our intent to support incentives, policies, and plans that could be leveraged in support of a flourishing and competitive regional hydrogen hub economy. We look forward to supporting the MCH2 efforts for continuing its application towards acceptance in being selected one of the U.S. Regional Hydrogen hubs in the Spring of 2023.

Sincerely,

bush (Mar 3, 2023 12:25 MST)

Kyle Quackenbush Segment President Liquids (Crude Oil & CO<sub>2</sub>)

# MCH2 Industry Letter of Support for hydrogen

# Hubs

Final Audit Report

2023-03-03

Created:	2023-03-03
Ву:	Jeff Schaefer (jeff.schaefer@tallgrassenergylp.com)
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## "MCH2 Industry Letter of Support for hydrogen Hubs" History

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- Signer kyle.quackenbush@tallgrass.com entered name at signing as Kyle Quackenbush 2023-03-03 7:25:25 PM GMT- IP address: 174.235.212.209
- Document e-signed by Kyle Quackenbush (kyle.quackenbush@tallgrass.com) Signature Date: 2023-03-03 - 7:25:27 PM GMT - Time Source: server- IP address: 174.235.212.209
- Agreement completed.
  2023-03-03 7:25:27 PM GMT



To: The Honorable Jennifer Granholm, Secretary of Energy

United States Department of Energy 1000 Independence Ave., SW Washington, DC 20585

### Dear Madam Secretary,

The Des Moines Branch of the NAACP is pleased to offer support for Nebraska Public Power District's (NPPD) application for the Regional Clean Hydrogen Hubs Grant (DE-FOA-OOO2779) to be accepted by the Office of Clean Energy Demonstrations (OCED). NPPD serves as the prime applicant for the Mid-Continent Clean Hydrogen Hub (MCH2) jointly formed by the states of Nebraska, Iowa, and Missouri.

The Des Moines Branch of the NAACP is committed to working hand in hand with the State of lowa, lowa State University, and the applicants to ensure the equity is brought to the forefront of this transformative clean energy project. We strongly believe in the energy justice 40 initiative that your administration has announced and feel strongly that the participants of this coalition are taking the steps to address those concerns.

The MCH2 coalition is engaging in historically marginalized populations in our region and examining how we can maximize the impacts of the federal investments in our communities. We look forward to supporting MCH2 community engagement planning and execution efforts regarding the Regional Clean Hydrogen Hubs Grant.

We stand in solidarity with this coalition to advance clean energy principles to help lowans of color thrive.

Sincerely,

Victoria Genderson Weber

Victoria Henderson Weber, President