

HEADQUARTERS 4615 N. Lewis Ave. Sioux Falls, SD 57104 Ph: (605) 965-2200 poet.com

July 24, 2023

South Dakota Public Utilities Commission 500 E. Capitol Ave. Pierre, SD 57501

Sent via: PUC@state.sd.us

### **RE: HP22-002 - In the Matter of the Application of Navigator Heartland Greenway, LLC for a Permit Under The South Dakota Energy Conversion and Transmission Facilities Act to Construct the Heartland Greenway Pipeline in South Dakota**

POET, the world's largest producer of biofuels, appreciates the opportunity to provide comments in support of Navigator's proposed carbon capture, utilization, and storage system, Heartland Greenway. POET supports the emissions reductions and economic growth accompanying the Heartland Greenway. Providing low-emission renewable alternatives to fossil products is central to POET's mission. The Heartland Greenway is a crucial tool for companies like POET to reduce lifecycle greenhouse gas emissions to meet the growing demand for low-carbon biofuels, maintain local markets for South Dakota corn, and sustain an abundant supply of feed products for local farmers. POET also believes Heartland Greenway will increase the local corn basis for farmers, create thousands in rural communities across South Dakota, and inject billions into the state's economy.

## **ABOUT POET**

POET's vision is to create a world in sync with nature. As the world's largest producer of biofuels and a global leader in sustainable bioproducts, POET creates plant-based alternatives to fossil fuels that utilize the power of agriculture and cultivate opportunities for America's farm families. Founded in 1987 and headquartered in Sioux Falls, POET operates 34 bioprocessing facilities across eight states and employs more than 2,400 team members. With a suite of bioproducts, including Dakota Gold and NexPro feed, Voilà corn oil, purified alcohol, renewable CO<sub>2</sub>, and JIVE asphalt rejuvenator, POET is committed to innovation and advancing solutions to some of the world's most pressing challenges. POET holds more than 80 patents and continues to break new ground in biotechnology, yielding ever-cleaner and more efficient renewable energy. In 2021, POET released its inaugural Sustainability Report pledging carbon neutrality by 2050.

## CARBON CAPTURE UTILIZATION & STORAGE: THE HEARTLAND GREENWAY SYSTEM

POET has partnered with Navigator CO2 for carbon capture, utilization, and storage (CCUS) services through Navigator CO2 Ventures' Heartland Greenway system. The system will phase in 18 of POET's bioprocessing facilities across Iowa, Nebraska, and South Dakota, capturing 5 million metric tons of POET's biogenic carbon dioxide ( $CO_2$ ) annually. The system is scheduled to begin operations in 2025.

#### **POET'S CCUS ACTIVITIES**

POET will capture carbon for both utilization and permanent sequestration. At the carbon capture stage, POET captures biogenic  $CO_2$  during the fermentation process rather than releasing it back into the atmosphere, then compresses it for transport. Some of POET's biogenic  $CO_2$  is utilized in the marketplace, like beverage carbonation, dry ice, food processing, and other uses. The rest of POET's captured  $CO_2$  will go into permanent geological storage. At the end of the Heartland Greenway route, the  $CO_2$  will be injected into wells for safe, permanent geological storage.

At POET, we take our responsibility to be good neighbors and stewards of the Earth very seriously. For more than 35 years, POET has cultivated opportunities for value-added agriculture, expanded markets for bioprocessing, and improved profit margins for family farmers so future generations can flourish on the land. CCUS will help agriculture thrive and keep POET, farmers, and rural communities growing together long into the future.

## CCUS AND SUSTAINABILITY

Sustainability is central to POET's mission and at the heart of our business. We have pledged carbon neutrality by 2050 and are constantly innovating to create sustainable renewable alternatives to fossil products. With the passage of the Inflation Reduction Act, many companies like POET are strongly incentivized to reduce GHG emissions drastically. The bioethanol industry is poised to reach net-zero and even negative carbon emissions in the next decade. CO<sub>2</sub> pipelines like the Heartland Greenway are integral to achieving these emissions reductions and meeting the growing demand for low-carbon biofuels.

## HOW DOES CCUS BENEFIT FARMERS?

CCUS provides farmers the opportunity to capitalize on the growing demand for lower-carbon biofuels. CCUS adds value to every acre of land and every bushel of corn produced, raising the premium on corn for South Dakota farmers by 19 cents per bushel.<sup>1</sup> Additionally, keeping bioethanol production competitive by reducing emissions through CCUS means steady domestic demand for local grain and abundant supplies of feed for many years to come. Thus, CCUS pipelines like Navigator's Heartland Greenway provide significant value for farmers.

## WHAT ARE THE BENEFITS TO SOUTH DAKOTA COMMUNITIES?

CCUS will yield thousands of new jobs, millions of dollars in local investments, and billions in economic growth. A recent study projects nearly \$6 billion in gross output for South Dakota from 2025 through 2034 if the pipelines are in service.<sup>2</sup> The study also found that CO<sub>2</sub> pipelines like Heartland Greenway may increase biofuel production, leading to more South Dakota jobs. If biofuel production increases by 15%, a total of 7,105 jobs will be added from 2024-2034.<sup>3</sup> The Heartland Greenway system will ensure lasting prosperity for our rural communities by strengthening POET's ability to provide jobs and income, support hometown businesses, and generate local tax revenues.

# IS CCUS SAFE?

State-of-the-art CCUS systems like the Heartland Greenway are the safest and most efficient methods to transport and store  $CO_2$ . Because they are buried underground, pipelines are less prone to accidents than other methods of transportation. In fact, pipelines are about 40 times safer than rail and truck transportation.<sup>4</sup> CCUS pipelines have an impressive safety record in part because they are strictly regulated

<sup>&</sup>lt;sup>1</sup> Economic Impacts of CO<sub>2</sub> Pipelines in South Dakota, DAKOTA INSTITUTE, 24 (May 2023),

https://sdethanol.com/wp-content/uploads/2023/05/Dakota-Institue-Economic-Impacts-of-CO2-Pipelines.pdf.  $^{2}$  Id at 7.

<sup>&</sup>lt;sup>3</sup> Id.

<sup>&</sup>lt;sup>4</sup> Are Pipelines Safer Than Rail or Truck?, HEARTLAND GREENWAY, https://heartlandgreenway.com/arepipelines-safer-than-rail-truck/ (last visited July 7, 2023).

by the government and undergo continuous monitoring and preventative maintenance. Additionally, Navigator has stated that they will employ an array of advanced technology systems to monitor the pipeline for leaks.<sup>5</sup>

The Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) strictly regulates and oversees pipelines, including  $CO_2$  pipelines, to ensure they are operated safely and efficiently. PHMSA sets robust requirements for pipeline construction, maintenance, and operation and conducts regular inspections to ensure compliance with these standards. PHMSA continually reviews regulations and updates them when necessary. When PHMSA updates its regulations, operators are required to work with the agency to develop a plan to bring the asset into compliance. Existing infrastructure is not allowed to be grandfathered into these safety regulations.

Given the rigorous regulatory requirements governing  $CO_2$  pipelines and Navigator's commitment to safety, POET strongly believes the Heartland Greenway is the best option to transport and permanently sequester  $CO_2$ . The Heartland Greenway provides a safe method of transportation for captured  $CO_2$  that will effectively help renewable fuel producers like POET reduce emissions while creating monetary opportunities for farmers and the state of South Dakota.

\* \* \*

POET appreciates the Commission's thoughtful consideration of these comments.

Sincerely,

Joshua Shields Sr. Vice President of Corporate Affairs POET LLC