

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA

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HP 22-002

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, :  
:  
:

**REBUTTAL TESTIMONY OF  
LAURA MCGLOTHLIN**

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**1. Please state your name, business address, and present position.**

Answer: My name is Laura McGlothlin. I am Executive Vice President and Chief Commercial Officer (“EVP & CCO”) of NES II LLC (“NES”) and Navigator CO2 Ventures LLC (“NCO2V”).

**2. What are your duties and responsibilities as EVP and CCO of NES and NCO2V?**

Answer: I am responsible for the commercial development and execution of contracts to add revenue to the company. Commercial development includes strategy creation, outreach to customers, deal structuring, and evaluation of commercial offerings and markets for future projects or expansion. I am also responsible for commercial development activities of the affiliated companies Navigator Heartland Greenway LLC (“Navigator”), Navigator Carbon Services, LLC, and HG Carbon Storage LLC.

**3. Please state your educational background and employment and business experience.**

Answer: I graduated with a Bachelor of Arts in Accounting and Mathematics from Southwestern University in 1996. After graduation, I began my career in public accounting

working for Arthur Andersen in the energy sector. After reaching the position of manager, I left in 2001 to join Enron Energy Services as Director of Operational Analytics. In 2002, I joined Duke Energy Corporation, progressing to jobs of increasing responsibility covering risk management, trading operations and budgeting/forecasting. In 2007, I joined Shell Trading US Company, where I moved from being a finance advisor to a manager of business development to a lease crude oil trading supervisor. At Shell, I negotiated and executed structured business deals worth over \$1.5 billion in value and managed a 150,000 barrel per day crude oil trading portfolio. In 2018, I started with Navigator Energy Services LLC as the EVP & CCO responsible for the commercial development for pipeline and storage assets, adding over \$750,000,000 in deal value to the portfolio. My role continues with NES and NCO2V in a similar capacity. A copy of my CV is marked as Exhibit A.

**4. Did you provide direct testimony in this case?**

Answer: No.

**5. To whose testimony are you responding in rebuttal?**

Answer: I am responding to the testimony of landowners, like Denis and Janet Anderson, who have challenged the commercial viability of the Navigator Heartland Greenway Pipeline (“the Project”) after the expiration of the 45Q and 45Z tax credits.

**6. Are the 45Q and 45Z tax credits important to the initial success of the Project?**

Answer: Yes. The customers who have signed agreements to ship carbon dioxide with Navigator derive significant economic value from the tax credits.

**7. Does that mean that the Project offers no value to current or future customers after the expiration of the tax credits?**

Answer: No. It is unknown today whether the tax credits will be extended in their current or some different form. The 45Q tax credit has been in existence since 2008 and has been significantly modified twice since. However, even if the credits expire, there are still several ways in which current and future customers of the Project can derive economic value from pipeline transportation of carbon dioxide.

**8. Please describe one way in which a customer derives economic value from the Project beyond the tax credits.**

Answer: The first way is through the qualification of a customer with the benefits outlined in Low Carbon Fuel Standard (LCFS) programs, which offer ethanol and other fuel producers marketable credits as incentives for meeting certain low carbon standards imposed by a state or another sovereign on fuel shipped to that state or country. For instance, California has a LCFS program that requires a reduction in the carbon intensity of transportation fuels that are sold, supplied, or offered for sale in the state by at least 20% through 2030 and beyond. The LCFS program allows producers and importers to generate, acquire, transfer, bank, borrow, and trade the credits offered for meeting the standard. The value of the credit is determined by the spot market. A fuel producer that captures and permanently sequesters carbon obtains a lower carbon intensity score, which allows the producer to qualify proportionately for more credits. Once applied, these marketable credits essentially allow the fuel producers with a lower carbon intensity score to benefit from a higher price per gallon of fuel sold in these markets. California has the most developed LCFS program for fuels with a lower-than-average carbon intensity score, but Oregon has a similar standard for low-carbon biofuel and other states are developing similar standards. Canada also has clean fuel regulations that provide market-based incentives

for liquid fuel producers who obtain a lower carbon intensity score. These LCFS and market-based incentives are different from the federal tax credits and do not expire with the tax credits.

**9. Please describe a second way that customers may derive economic value from the project beyond tax credits.**

Answer: There are developing voluntary carbon offset markets around the world where businesses buy and sell carbon offsets, or credits. Each carbon offset represents one metric ton of carbon dioxide removed, reduced or avoided in the atmosphere. By purchasing carbon offsets from companies that remove or reduce carbon, buyers in both the private and public sectors can mitigate the impact of their emissions as they work toward meeting or exceeding their sustainability goals. According to Morgan Stanley's research, a copy of which is attached as Exhibit B, the voluntary carbon offset market is expected to grow from \$2 billion in 2020 to around \$250 billion in 2050. This increase in demand for carbon offsets will provide additional value to sellers beyond the tax credits.

To further the pathway for customers to monetize the value of their carbon offsets, Navigator announced an agreement on May 23, 2023 with Puro.earth, a subsidiary of Nasdaq and the world's leading carbon crediting platform for engineered carbon removal, to validate and certify Navigator's carbon dioxide removal credits. As described in the press release attached as Exhibit C, Puro's Geologically Stored Carbon Methodology is endorsed by the International Carbon Reduction and Offset Alliance. Once validated, Puro issues digital tradable CO<sub>2</sub> removal certificates, which may be purchased directly from buyers to help neutralize the buyer's residual carbon emissions. This market is attractive for businesses that do not have other ways to capture carbon dioxide or reduce their production of carbon dioxide economically.

In this way, carbon dioxide has become a tradable commodity and Navigator expects that the volume of trading will increase significantly in the future. Additionally, a disproportionate amount of carbon offset trades today is developed from nature-based solutions. However, the practical limitations around nature-based solutions (lack of permanence, limited quantity) will drive an increase in reliance on technology-based, engineered, and verifiable removals derived from permanent carbon storage and removal. This shift in reliance on technology and permanent removal coupled with an increase in demand should improve the value for the carbon offsets created from projects like the Heartland Greenway. Of note, a company that removes or reduces their carbon dioxide emissions may not both sell carbon offsets and benefit from LCFS incentives. So for companies that cannot efficiently or economically transport their fuels to reach LCFS markets and monetize that value, tradable carbon offsets offer added economic benefit beyond the tax credits.

**10. Is there a commercial market for the use of carbon dioxide from which Navigator’s current and future customers may benefit?**

Answer: Yes. Carbon dioxide is currently used commercially in many ways, including, use in the food and beverage industry, dry ice, welding, fire extinguishers, cleaning, and in other products like cement. In addition to these uses, other companies are developing ways to use carbon dioxide in the production of electrofuels, also known as eFuels. On May 18, 2023, Navigator issued a press release, a copy of which is attached as Exhibit D, announcing that it had entered into a Memorandum of Understanding and long-term relationship with Infinium to deliver 600,000 tons per annum of biogenic carbon dioxide from the pipeline to a future facility for the production of eFuels. Project developers like Infinium need access to a diversified, consistent, and reliable supply of carbon dioxide that the Navigator Heartland Greenway pipeline

can deliver. Navigator is currently working on similar long-term agreements with other potential customers who will need a larger and more reliable supply of carbon dioxide for their commercial and industrial purposes that could not be efficiently or economically satisfied through the shipment of carbon dioxide by truck or rail. Navigator expects that there will be significant expansion and development of such commercial uses that will drive future demand for carbon dioxide shipped through the Navigator Heartland Greenway pipeline. The term of these long-term agreements and demand for use of carbon dioxide to make various products exceeds the term of the tax credits, adding alternative value streams to customers.

**11. Do current shipper agreements reflect demand for the Project after the expiration of tax credits?**

Answer: Yes. Navigator's current agreements with its shippers all include options that would extend the term of the agreements beyond the expiration of tax credits.

**12. Does this conclude your testimony?**

Answer: Yes.

Dated this 26th day of June, 2023.

/s/ Laura McGlothlin  
Laura McGlothlin