

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA**

**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**

**DOCKET NO. HP22-002**

**Direct Testimony of Alissa Ingham  
On Behalf of the Staff of the South Dakota Public Utilities Commission  
May 25<sup>th</sup>, 2023**



1 **Q: Please state your name and business address.**  
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3 A: Alissa N. Ingham; 1180 Eugenia Place, Suite 204, Carpinteria, California 93013.  
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5 **Q: Describe your educational background.**  
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7 A: I received a Bachelor of Science degree in 2012 from California Polytechnic State  
8 University, San Luis Obispo with a major in Environmental Management and  
9 Protection (concentration in Environmental Policy and Management).  
10  
11 **Q: By whom are you now employed?**  
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13 A: I have been employed by Environmental Resources Management, Inc. since 2012.  
14 I currently hold the title of Partner, Scientist, and serve in an advisory and technical  
15 oversight role.  
16  
17 **Q: What work experience have you had that is relevant to your involvement on  
18 this project?**  
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20 A: I have over a decade of experience providing clients in the pipeline and  
21 transmission line industries with environmental review services. My career  
22 experience also includes obtaining necessary authorizations and securing  
23 regulatory approvals from Federal, State, and Local-level authorities for  
24 construction and operation of linear projects within the United States. In my current  
25 role I lead the preparation of impact assessments for projects undergoing review  
26 under National Environmental Policy Act or applicable state programs. In my  
27 experience leading the preparation of land use impact assessments I have worked  
28 on projects across the United States including two natural gas gathering systems  
29 and a natural gas transmission line project in the Dakotas.  
30  
31 **Q: What is the purpose of your testimony?**  
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33 A: I reviewed the permit Application for the Navigator Heartland Greenway Pipeline  
34 System: Application Submitted Under SDCL Chapter 49-41B Section 6.8 (Land  
35 Use) for completeness and adequacy against requirements set out in South  
36 Dakota Administrative Rule 20:10:22:18. My evaluation was to determine whether  
37 a sufficient level of detail was provided to characterize land use associated with  
38 the Navigator Heartland Greenway Pipeline System.  
39  
40 **Q: Please summarize what you reviewed?**  
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42 A: I assessed the information provided in Section 6.8 – Land Use of the Navigator  
43 Heartland Greenway Pipeline System, as well as Exhibit A6- Land Cover Maps,  
44 comparing it to the requirements set forth in South Dakota Administrative Rule  
45 20:10:22:18. I also assessed the information provided by comparing it to

46 information typically provided in comparable industry-standard applications for  
47 projects undergoing state and federal review. Additionally, I reviewed Navigator  
48 Heartland Greenway LLC's (Navigator) responses to PUC staff's data requests  
49 where Navigator provided additional information on certain land-use related topics.  
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51 **Q: Did you review section 2.0 of Navigator's Application?**

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53 A: Yes. I reviewed Section 2.0 – Project Siting and Route of Navigator's application.  
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55 **Q: Please summarize what information was included in that section.**

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57 A: Section 2.0 discusses the siting of the Navigator Heartland Greenway Pipeline  
58 System, how the proposed route was chosen, alternatives considered, and a  
59 description of how the proposed route minimized impacts and maintains the health  
60 and safety of the public and environment.  
61

62 **Q: In your experience, what types of information and analysis goes into  
63 determining a route for a linear facility? Please explain.**

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65 A: In my experience, digital tools and information have been used to allow routing for  
66 linear facilities to happen in such a way that allows for a high quality,  
67 environmentally conscious, and constructable route to be selected often before  
68 field work or landowner negotiations have begun. By selecting a route that is the  
69 shortest distance between the beginning and end point while also considering  
70 digitally available information (e.g., existing infrastructure, floodplains, or  
71 recreational areas), it minimizes risks and maximizes efficiency. Once a general  
72 route is in place, it is optimized through consideration of various environmental  
73 factors (e.g., hydrology, listed species, community impact), constructability,  
74 availability of property and landowner considerations, and safety. Through  
75 processes such as negotiations with landowners, public meetings, consultations  
76 with federal, state, and local agencies, routes are often adjusted to shorten the  
77 permitting and environmental review process and landowner negotiations by  
78 minimizing impacts as much as possible.  
79

80 **Q: In your opinion, do you find that Navigator conducted a robust route  
81 analysis and optimization? Please explain.**

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83 A: Navigator appears to have conducted a route analysis and optimization in line with  
84 industry standards and South Dakota Administrative Rule.  
85

86 **Q: Is there any information missing from the route analysis completed by  
87 Navigator?**

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89 A: No, Navigator's route analysis appears to be complete.  
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91 **Q: Did you review section 6.8 of Navigator's Application on Land Use?**

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A: Yes. I reviewed Section 6.8 – Land Use of Navigator’s application.

**Q: In your opinion, did Navigator properly identify the land use types to be crossed by the pipeline?**

A: Navigator identified land use categories by aligning SD Land Use Classifications listed in South Dakota Administrative Rule 20:10:22:18(1) with the equivalent National Land Cover Dataset (NLCD) land use category. Land use types were authenticated with field surveys. Two of the SD Land Use Classification types (existing and potential extractive nonrenewable resources and noise sensitive land uses) do not have an equivalent NLCD land use category and were discussed in other sections of the Application. In my opinion this approach is acceptable provided the information required by South Dakota Administrative Rule 20:10:22:18 is adequately discussed in the alternate section. In Section 6.2.3 – Economic Deposits, Navigator adequately discusses the types and location of extractive nonrenewable resources. In Section 7.8 – Community Impact - Noise, Navigator discusses noise associated with construction and operation of the Navigator Heartland Greenway Pipeline System and indicates that there will be no impacts related to noise on residential or commercial areas, effectively identifying residential and commercial areas as being noise sensitive. To properly identify the land use types to be crossed by the pipeline, Navigator should update the maps to show the land use types listed in South Dakota Administrative Rule 20:10:22:18.

**Q: In your opinion, did Navigator properly analyze the compatibility of the proposed facility in regard to its effects on rural life and the business of farming?**

A: No, Navigator did not properly analyze the compatibility of the proposed facility regarding its effect on rural life and the business of farming. Navigator identified land use categories by aligning SD Land Use Classifications listed in South Dakota Administrative Rule 20:10:22:18(1) with the equivalent NLCD land use category for purposes of quantifying and presenting land use impacts. Table 6.8-1 (SD Land Use and NLCD Equivalent Categories) of the application indicates that lands used primarily for row and non-row crops in rotation as well as irrigated lands will be classified as “cultivated crops” for purposes of the discussion. In Table 6.8-2 (Land Uses Crossed by the Heartland Greenway Pipeline System Centerline) of their application, Navigator presents impacts on cultivated crops as being 98.82 of the 111.92 total acres of project impacts. Navigator asserts that outside of the small permanent impacts associated with the Navigator Heartland Greenway Pipeline System, no permanent effect on surrounding land uses will result from project construction and operation. Navigator should analyze the compatibility of the proposed project with present land uses, particularly on land used primarily for row and non-row crops in rotation, and irrigated lands. Additionally, the application does not currently describe mitigation measures for impacts on land used primarily for row and non-row crops in rotation, and irrigated lands. Because a large

138 percentage of the total project impacts fall into these land use classifications and  
139 the public concern around impacts of pipelines on the business of farming  
140 necessitate further analysis and discussion on the topic of the proposed facility in  
141 regard to its effect on the business of farming.

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143 **Q: Are there any noise sensitive land uses crossed by the project?**

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145 A: The Application does not identify any noise sensitive land uses in section 6.8,  
146 instead referencing that impacts from noise are discussed in Section 7.8. In  
147 Section 7.8, Navigator indicates that there will be no impacts related to noise on  
148 residential or commercial areas, effectively identifying residential and commercial  
149 areas as being noise sensitive. Residential and commercial areas are not shown  
150 on Exhibit A6. In the Applicant's Responses to Staff's Fourth Set of Data Requests  
151 (4-11, 4-12, 4-13, and 4-14), distances in feet to other areas that could be  
152 considered noise sensitive were identified.

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154 **Q: Are sound levels from project construction or operation a concern to those  
155 noise sensitive land uses?**

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157 A: It is unclear if sound levels from construction is of concern through a review of the  
158 currently provided information. Navigator should provide an updated map set  
159 showing noise sensitive land use types and text describing how impacts on noise  
160 sensitive land uses will be avoided. For example, standard construction techniques  
161 for pipeline installation may not be a concern for noise sensitive areas, but  
162 installation via HDD may be a concern depending on the distance to those noise  
163 sensitive areas. Navigator has indicated that no impacts from noise are associated  
164 with operation of the Navigator Heartland Pipeline System.

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166 **Q: Did Navigator properly quantify the potential impacts to noise sensitive  
167 land uses?**

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169 A: Navigator asserts that there will be no impacts on residential or commercial areas.  
170 In the Applicant's Responses to Staff's Third Set of Data Requests, Navigator  
171 describes HDD construction activities as having the potential to approach 55 DbA  
172 Ldn but does not quantify the potential impacts on noise sensitive land uses.  
173 Navigator should clearly show how noise impacts will be mitigated for all noise  
174 sensitive land use types within ¼ mile of HDD activities, and mitigation measures  
175 should quantify the expected reduction in noise as appropriate.

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177 **Q: Did Navigator identify any mitigation measures for noise sensitive land  
178 uses? If yes, please summarize what mitigation measures will be  
179 implemented.**

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181 A: In the Applicant's Responses to Staff's Third Set of Data Requests (see  
182 attachment to testimony of Jon Thurber), Navigator indicates that residences within  
183 ¼ mile of HDD construction activities may be affected if work is to take place

184 between the hours of 7:00 PM and 7:00 AM due to noise potential approaching 55  
185 DbA Ldn. In the application, Navigator commits to coordinating with affected  
186 persons and offering compensation and hotel accommodations, a reasonable  
187 mitigation measure in line with industry standards.  
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189 **Q: Do you have any recommendations for further mitigation measures to**  
190 **protect noise sensitive land uses?**  
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192 A: No. Without a clear understanding of where noise sensitive land uses are located,  
193 I am unable to provide recommendations for further mitigation measures to protect  
194 noise sensitive land uses. I am aware that past pipelines permitted by the PUC  
195 have had noise conditions related to operation. However, unlike those projects,  
196 Navigator would not have similar facilities, such as a pump station, located within  
197 this state. Therefore, a similar condition would be unapplicable in this  
198 circumstance.  
199

200 **Q: Are there any other types of land uses crossed by the project that the**  
201 **Commission should be concerned about?**  
202

203 A: No. I did not identify any other type of land use crossed by the project that warrants  
204 additional concern by the PUC.  
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206 **Q: Does this conclude your testimony?**  
207

208 A: Yes.

# Alissa Ingham

Partner

Ms. Alissa Ingham has a decade of experience in the energy industry including capital project development, risk advisory, and merger and acquisitions support focused on the upstream and midstream oil and gas sector. She is responsible for oversight of multi-disciplinary teams, supervising the preparation of NEPA documents, and acquisition of federal, state, and local permits. As an advisor in environmental and regulatory matters, Alissa helps clients prepare executable and successful permitting strategies. Her broad experience with federal and state permitting requirements for energy infrastructure projects makes Alissa well-suited to ensuring successful projects.



**Experience:** Ten years' experience in oil & gas sector

**Email:** [Alissa.Ingham@erm.com](mailto:Alissa.Ingham@erm.com)

**LinkedIn:** <https://www.linkedin.com/in/alissa-ingham-540aa33b/>

## Education/Relevant Training

- Environmental Management and Protection, Policy and Management, California Polytechnic State University, San Luis Obispo, 2012

## Languages

- English, native speaker

## Fields of Competence

- Federal, State and Local Permitting
- Federal Energy Regulatory Commission (FERC) Licensing
- National Environmental Policy Act (NEPA) Reviews
- U.S. Army Corps of Engineers (USACE) permitting and compliance
- Linear infrastructure planning and development
- Environmental impact assessment
- Capital Project Delivery
- Construction Compliance

## Key Industry Sectors

- Oil & gas
- Power

## Key Projects

### **Nuclear Power Plant Decommissioning Project – 2022-2023**

Strategic Planning Advisor responsible for NEPA permitting strategy for the decommissioning of a nuclear power plant in California. Responsible for a USACE individual permit application for impacts on waters of the United States and applicant prepared Environmental Assessment, as well as development of an applicant prepared Biological Assessment for impacts on federally-listed species.

### **LNG Export Facility and Natural Gas Pipeline – 2021-2023**

Strategic Planning Advisor responsible for federal, state, and local permitting required for the development of a 20 MTPA LNG export facility, marine loading berths, and 85-mile pipeline in Texas and Louisiana. Responsible for schedule development, risk management, and lead for agency consultations. The project involves complex permitting with the USACE and formal consultations with USFWS and NMFS.

### **Natural Gas Pipeline Project – 2022-2023**

Partner in Charge for a FERC-regulated natural gas pipeline and associated facilities in South Dakota. Responsible for permitting strategy, FERC license application and associated environmental report, and responsible for the overall

### **LNG Export Project – 2018-2023**

Partner in Charge with overall responsibility for ensuring permit compliance during the construction phase, implementation planning, FERC variance requests, permit modifications, and field surveys.

### **Helium Extraction Project – 2019-2023**

Project Manager in charge of developing a FERC Section 3 application for jurisdictional components of a helium extraction project. Provided permitting, regulatory strategy, and risk management advice. Responsible for the development of a FERC

Environmental Report, permitting, and supporting documents.

### **ESG Due Diligence Assessment – Freeport LNG**

Engaged by a potential investor to assess ESG risks and opportunities associated with Freeport LNG's assets in Brazoria County, TX. Authored an ESG Due Diligence Assessment used to prepare for the sale of the investor's interest in Freeport LNG's assets.

### **CBRE / UPS**

Point of Contact for the CBRE-UPS project to support environmental needs at UPS sites across the western United States.

### **Freeport LNG, GHG Gap Assessment and Life Cycle Carbon Footprint Project**

Project manager responsible for a GHG gap assessment and preparation of a gate-to-gate GHG emissions estimate for LNG production.

### **Natural Gas Pipeline Project**

Project involves approximately 518 miles of 30-inch and 24-inch diameter pipe to transport natural gas liquids from El Reno, Oklahoma to Mont Belvieu, Texas. Functioned as a permitting lead for the portion of the project located in Texas and assisting client with route optimization and permitting strategy to minimize regulatory exposure.

### **Freeport LNG, Operational Compliance**

Developed a tracking and reporting system to manage obligations during operation of Freeport LNG's FERC-regulated Liquefaction Project. Deputy Project Manager responsible for compiling a database of compliance requirements and permits, and developing an Environmental Regulatory Plan.