

**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 25th, 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.
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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.
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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.
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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.
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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.
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200 **Q: Are there any other types of land uses crossed by the project that the**
201 **Commission should be concerned about?**
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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?**
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208 A: Yes.