

Federal Energy
Regulatory
Commission

Office of
Energy Projects

February 2024

WBI Energy Transmission, Inc.

Docket No. CP23-535-000

SOUTH SPEARFISH PROJECT

Environmental Assessment

Washington, DC 20426

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas 1
WBI Energy Transmission, Inc.
Docket No. CP23-535-000

TO THE INTERESTED PARTY:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared an environmental assessment (EA) for the South Spearfish Project proposed by WBI Energy Transmission, Inc. (WBI Energy) in the above-referenced docket. WBI Energy requests authorization to construct, uprate, modify operate, and abandon natural gas facilities in Lawrence County, South Dakota. The proposed project activities include:

- remove an existing pressure regulation and overpressure protection equipment and the valve setting for the Deadwood-Central City Lateral on Line Section 15;
- increase the maximum allowable operating pressure of the 8-inch-diameter Deadwood-Central City Lateral from the Deadwood Mainline Transfer Station to the proposed South Spearfish Station from 200 pounds per square inch gauge (psig) to 470 psig;
- install two pig launcher/receivers;¹
- construct a new South Spearfish Station adjacent to the existing South Spearfish Lateral Takeoff Valve Setting;
- relocate approximately 500 feet of the South Spearfish Lateral; and
- abandon by sale to Montana-Dakota Utilities Company the existing 5.5-mile-long 4-inch-diameter South Spearfish Lateral and certain equipment at the existing South Spearfish Town Border Station.

The proposed project would allow for the redirection of incremental firm transportation capacity from WBI Energy's existing Line Section 15 in western South Dakota to meet the natural gas needs of shippers in the Black Hills region of western South Dakota, including Montana-Dakota Utilities Company.²

¹ A "pig" is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes. A pig launcher/receiver are facilities where pigs are inserted/retrieved from the pipeline.

² Under Docket CP23-87-000, WBI Energy was authorized to modify its Line Section 15 in Butte, Lawrence, Meade, and Pennington Counties, South Dakota in order to provide 15,000 dekatherms per day to Montana-Dakota Utilities Company for 10 years. The instant project would allow for this existing capacity to be directed to the proposed South Spearfish Station.

The EA assesses the potential environmental effects of the construction and operation of the South Spearfish Project in accordance with the requirements of the National Environmental Policy Act. The FERC staff concludes that approval of the proposed project, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment.

The Commission mailed a copy of the *Notice of Availability* of the EA to federal, state, and local government representatives and agencies; elected officials; Native American Tribes; potentially affected landowners and other interested individuals and groups; and libraries in the project area. The EA is only available in electronic format. It may be viewed and downloaded from the FERC's website (www.ferc.gov), on the natural gas environmental documents page (<https://www.ferc.gov/industries-data/natural-gas/environment/environmental-documents>). In addition, the EA may be accessed by using the eLibrary link on the FERC's website. Click on the eLibrary link (<https://elibrary.ferc.gov/eLibrary/search>), select "General Search" and enter the docket number in the "Docket Number" field (i.e. CP23-535). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at (866) 208-3676, or for TTY, contact (202) 502-8659.

The EA is not a decision document. It presents Commission staff's independent analysis of the environmental issues for the Commission to consider when addressing the merits of all issues in this proceeding. Any person wishing to comment on the EA may do so. Your comments should focus on the EA's disclosure and discussion of potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. The more specific your comments, the more useful they will be. To ensure that the Commission has the opportunity to consider your comments prior to making its decision on this project, it is important that we receive your comments in Washington, DC on or before 5:00pm Eastern Time on **March 27, 2024**.

For your convenience, there are three methods you can use to file your comments to the Commission. The Commission encourages electronic filing of comments and has staff available to assist you at (866) 208-3676 or FercOnlineSupport@ferc.gov. Please carefully follow these instructions so that your comments are properly recorded.

- You can file your comments electronically using the [eComment](#) feature on the Commission's website (www.ferc.gov) under the link to [FERC Online](#). This is an easy method for submitting brief, text-only comments on a project;
- You can also file your comments electronically using the [eFiling](#) feature on the Commission's website (www.ferc.gov) under the link to [FERC Online](#). With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "[eRegister](#)." You must select the type of filing you are making. If you are filing a comment on a particular project, please select "Comment on a Filing;" or

- You can file a paper copy of your comments by mailing them to the Commission. Be sure to reference the project docket number (CP23-535-000) on your letter. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

Filing environmental comments will not give you intervenor status, but you do not need intervenor status to have your comments considered. Only intervenors have the right to seek rehearing or judicial review of the Commission's decision. At this point in this proceeding, the timeframe for filing timely intervention requests has expired. Any person seeking to become a party to the proceeding must file a motion to intervene out-of-time pursuant to Rule 214(b)(3) and (d) of the Commission's Rules of Practice and Procedures (18 CFR 385.214(b)(3) and (d)) and show good cause why the time limitation should be waived. Motions to intervene are more fully described at <https://www.ferc.gov/how-intervene>.

Additional information about the project is available from the Commission's Office of External Affairs, at (866) 208-FERC, or on the FERC website (www.ferc.gov) using the [eLibrary](#) link. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members, and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502-6595 or OPP@ferc.gov.

In addition, the Commission offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to <https://www.ferc.gov/ferc-online/overview> to register for eSubscription.

TABLE OF CONTENTS

A.	PROPOSED ACTION	6
1.0	INTRODUCTION	6
2.0	PURPOSE AND NEED.....	6
3.0	PUBLIC PARTICIPATION AND COMMENT	7
4.0	SCOPE OF THIS ASSESSMENT.....	8
5.0	PROPOSED FACILITIES.....	8
6.0	LAND REQUIREMENTS.....	14
7.0	ABANDONMENT AND CONSTRUCTION PROCEDURES.....	14
8.0	CONSTRUCTION SCHEDULE.....	15
9.0	PERMITS, APPROVALS, AND REGULATORY CONSULTATIONS	15
B.	ENVIRONMENTAL ANALYSIS	17
1.0	GEOLOGY	17
1.1	MINERAL RESOURCES	17
1.2	GEOLOGIC HAZARDS	18
1.3	PALEONTOLOGICAL RESOURCES.....	19
2.0	SOILS	19
3.0	GROUNDWATER RESOURCES	21
3.1	WATER USE.....	21
4.0	VEGETATION AND WILDLIFE	22
4.1	VEGETATION	22
4.2	WILDLIFE.....	23
4.3	MIGRATORY BIRDS.....	23
4.4	SPECIAL STATUS SPECIES.....	24
5.0	LAND USE, RECREATION, AND VISUAL IMPACTS.....	25
5.1	LAND USE.....	25
5.2	RECREATIONAL RESOURCES.....	25
5.3	VISUAL RESOURCES.....	26
6.0	CULTURAL RESOURCES	26
7.0	ENVIRONMENTAL JUSTICE	28
7.1	MEANINGFUL ENGAGEMENT AND PUBLIC INVOLVEMENT	29
7.2	IDENTIFICATION OF ENVIRONMENTAL JUSTICE COMMUNITIES	30
7.3	IMPACTS ON ENVIRONMENTAL JUSTICE COMMUNITIES	33
7.4	ENVIRONMENTAL JUSTICE IMPACT MITIGATION	35
7.5	IMPACTS ON ENVIRONMENTAL JUSTICE COMMUNITIES	35
8.0	AIR QUALITY	36
8.1	EXISTING AIR QUALITY	36
8.2	PERMITTING REGULATORY REQUIREMENTS	37
8.3	CONSTRUCTION EMISSIONS.....	38
8.4	OPERATIONAL EMISSIONS	39
9.0	NOISE.....	39
9.1	CONSTRUCTION NOISE.....	40
9.2	OPERATION.....	41
10.0	RELIABILITY AND SAFETY.....	41

11.0 CUMULATIVE EFFECTS	44
11.1 CLIMATE CHANGE	45
C. ALTERNATIVES.....	49
1.0 NO ACTION ALTERNATIVE.....	50
2.0 SYSTEM ALTERNATIVES.....	50
3.0 SITE ALTERNATIVES	50
D. CONCLUSIONS AND RECOMMENDATIONS	51
E. LIST OF PREPARERS.....	55
F. REFERENCES	56

List of Tables

Table 1 Summary of Land Requirements Associated with the South Spearfish Project.....	14
Table 2: Permits and Approvals.....	16
Table 3: Breakdown of Land Requirements	22
Table 4: Comprehensive List of Birds of Conservation Concern in the Project Area.....	24
Table 5 - Minority Populations in the Project Area.....	31
Table 6: Estimated Construction Emissions	39
Table 7: Blowdown Noise NSAs at the Deadwood Mainline Transfer Station	41
Table 8: Operational Noise Impact Results, South Spearfish Station	41

TECHNICAL ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effect
CAA	Clean Air Act
CEQ	Council on Environmental Quality
<i>CEQ Environmental Justice Guidance</i>	<i>Environmental Justice Guidance Under the National Environmental Policy Act</i>
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalents
EA	Environmental Assessment
EI	Environmental Inspector
EJScreen	Environmental Justice Screening and Mapping Tool
FERC or Commission	Federal Energy Regulatory Commission
FERC Plan	<i>Upland Erosion Control, Revegetation, and Maintenance Plan</i>
FERC Procedures	<i>Wetland and Waterbody Construction and Mitigation Procedures</i>
FWS	U.S. Fish and Wildlife Service
GHG	greenhouse gas
GWP	Global Warming Potential
HAPs	hazardous air pollutants
HUC	Hydrologic Unit Code
Montana-Dakota	Montana-Dakota Utilities Company
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NOAA	National Oceanic Atmospheric Administration
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
NOS	<i>Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed South Spearfish Project</i>
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
NSA	noise sensitive area
OEP	Office of Energy Projects
OPP	Office of Public Participation
PHMSA	Pipeline and Hazardous Materials Safety Administration

PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to 10 microns
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
Promising Practices Secretary	<i>Promising Practices for EJ Methodologies in NEPA Reviews</i> Secretary of the Commission
psig	pounds per square inch gauge
SHPO	State Historic Preservation Office
SO ₂	sulfur dioxide
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geologic Survey
VOC	volatile organic compounds

A. PROPOSED ACTION

1.0 INTRODUCTION

On August 28, 2023, WBI Energy Transmission, Inc. (WBI Energy) filed an application, in Docket No. CP23-535-000, under Section 7(c) and Section 7(b) of the Natural Gas Act (NGA), as amended, and Part 157 of the regulations of the Federal Energy Regulatory Commission (Commission) requesting authorization to construct, uprate, modify, operate, and abandon the natural gas facilities described herein in Lawrence County, South Dakota, known as the South Spearfish Project (Project). The Project would replace existing facilities and allow WBI Energy to increase delivery volumes to the South Spearfish Town Border Station.

We³ prepared this environmental assessment (EA) in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (Title 40 of the Code of Federal Regulations [CFR], Parts 1500-1508 [40 CFR 1500-1508]),⁴ and the Commission's regulations for implementing NEPA (18 CFR 380).

The assessment of environmental impacts is an integral part of the Commission's decision-making process to determine whether to authorize WBI Energy's proposal. Our principal purposes in preparing this EA are to:

- identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed action;
- identify, assess, and recommend reasonable alternatives and specific mitigation measures, as necessary, to avoid or minimize Project-related environmental impacts; and
- encourage and facilitate public and interested agency involvement in the environmental review process.

2.0 PURPOSE AND NEED

The Commission is an independent regulatory agency and conducts a complete independent review of project proposals, including an environmental review of proposed facilities. Under Section 7(c) of the NGA, the Commission determines whether interstate natural gas facilities are in the public convenience and necessity and, if so, grants a Certificate to construct and operate them. Section 7(b) of the NGA specifies that no natural gas company shall abandon any portion of its facilities subject to the Commission's jurisdiction without the Commission first finding that the abandonment would not negatively affect the present or future

³ "We," "us," and "our" refer to the environmental and engineering staff of the Office of Energy Projects.

⁴ National Environmental Policy Act of 1969, amended (Pub. L. 91-190, 42 U.S.C. §§ 4321–4347, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, Pub. L. 97-258, §4(b), September 13, 1982, Pub. L. 118-5, June 3, 2023).

public convenience or necessity. The Commission bases its decisions on both economic issues, including need, and environmental impacts.

The purpose of the South Spearfish Project is to allow for incremental firm transportation capacity along WBI Energy's Line Section 15 to be directed to Spearfish, South Dakota for the shipper, Montana-Dakota Utilities Company (Montana-Dakota).⁵ Montana-Dakota entered into a binding Precedent Agreement for firm transportation service of 15,000 equivalent dekatherms per day for 10 years to serve four primary delivery locations in western South Dakota, including Spearfish, South Dakota. The proposed South Spearfish Project would not add any new capacity.

3.0 PUBLIC PARTICIPATION AND COMMENT

On September 11, 2023, FERC issued a *Notice of Application and Establishing Intervention Deadline* for WBI Energy's Project in Docket No. CP23-535-000. The notice was published in the Federal Register⁶ announced receipt of WBI Energy's application pursuant to sections 7(b) and 7(c) of the NGA, identified ways for the public to provide comments on the Project, and established a deadline for submitting a motion to intervene in the proceeding. Natural Gas Supply Association and the Center for LNG filed for intervenor status.

On October 13, 2023, the Commission issued a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed South Spearfish Project* (NOS). The NOS opened a 30-day scoping period and was published in the Federal Register⁷ and was mailed to federal, state, and local officials; agency representatives; affected landowners (as defined by the Commission's regulations); environmental and public interest groups; Native American Tribes; and local libraries. We received comments from the South Dakota State Historic Preservation Office (SHPO) and the Bureau of Land Management. The Bureau of Land Management stated that they had no comments for this project. The SHPO commented that the Frawley Ranch National Historic Landmark is within the Project area and recommended visual screening to avoid adversely affecting the landmark and other historic properties.

This EA addresses the potential environmental impacts of WBI Energy's proposed Project and our own independent evaluation of environmental resource impacts and mitigation strategies. Substantive comments (including those by the SHPO) are addressed in the corresponding sections of the EA.

⁵ Under Docket CP23-87-000, WBI Energy was authorized to modify its Line Section 15 in Butte, Lawrence, Meade, and Pennington Counties, South Dakota in order to provide 15,000 dekatherms per day to Montana-Dakota Utilities Company for 10 years. The instant project would allow for this existing capacity to be directed to the proposed South Spearfish Station.

⁶ 88 Fed. Reg. 63,561 (Sept. 15, 2023).

⁷ 88 Fed. Reg. 72,052 (Oct. 19, 2023).

4.0 SCOPE OF THIS ASSESSMENT

As the lead federal agency for the Project, FERC is required to comply with section 7 of the Endangered Species Act and section 106 of the National Historic Preservation Act. These statutes have been considered in the preparation of this EA. This EA is not a decision-making document. However, FERC will use this document to consider the environmental impacts that could result if it authorizes the Project. In addition to FERC, other federal, state, and local agencies may use this EA in approving or issuing permits for all or part of the proposed Project. Permits, approvals, and consultations for the Project are discussed in section A.9.

The topics addressed in this EA include geology, soils, water resources and wetlands, wildlife, vegetation, species of special concern, cultural resources, air quality, noise, land use, recreation, visual resources, reliability and safety, environmental justice, and cumulative effects (see section B). This EA describes the affected environment as it currently exists and the environmental consequences of the Project and compares the Project's potential impact with that of various alternatives, including the no-action alternative (see section C). This EA also presents our conclusions and recommended mitigation measures (see section D).

5.0 PROPOSED FACILITIES

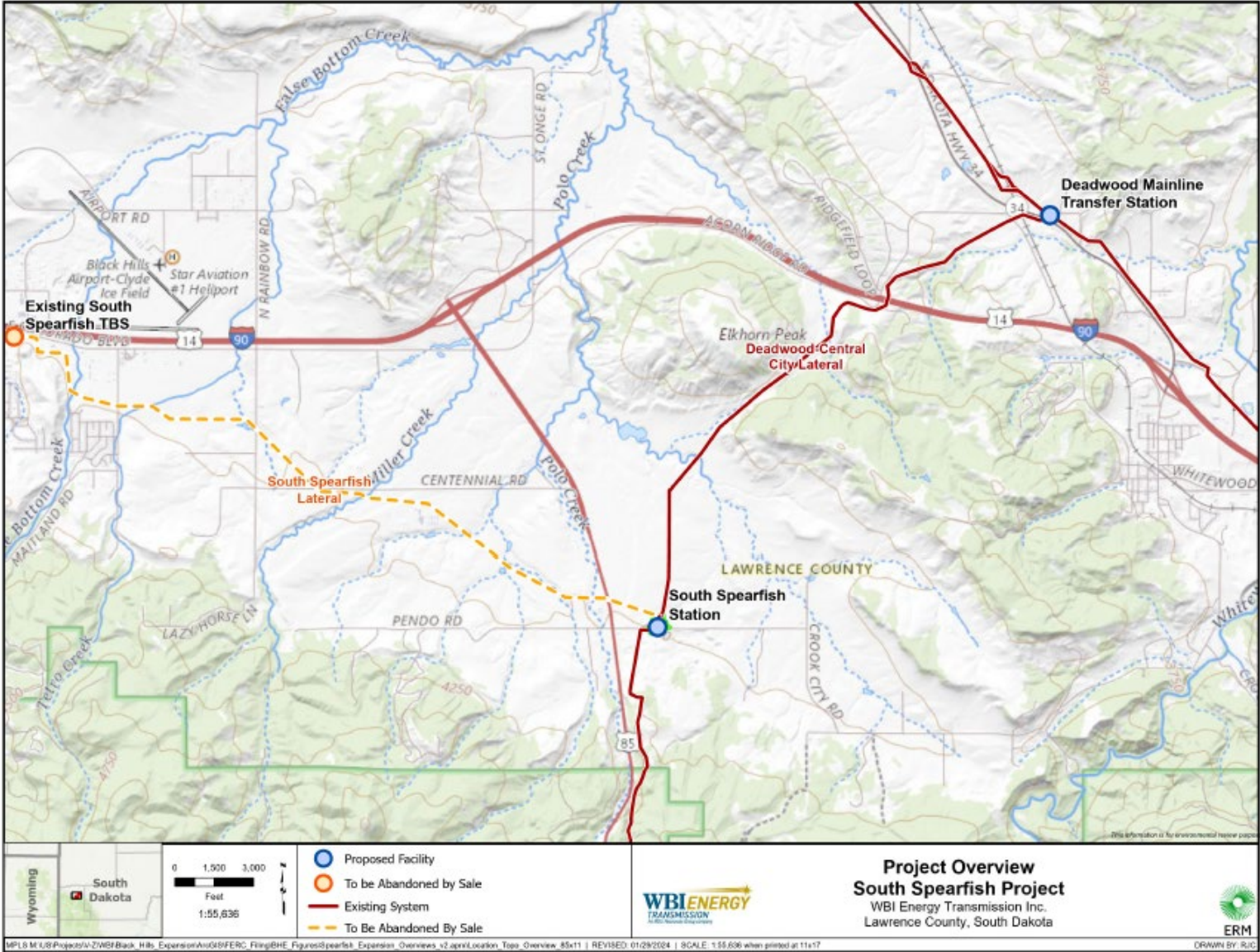
WBI Energy's proposed South Spearfish Project consists of the following in Lawrence County, South Dakota:

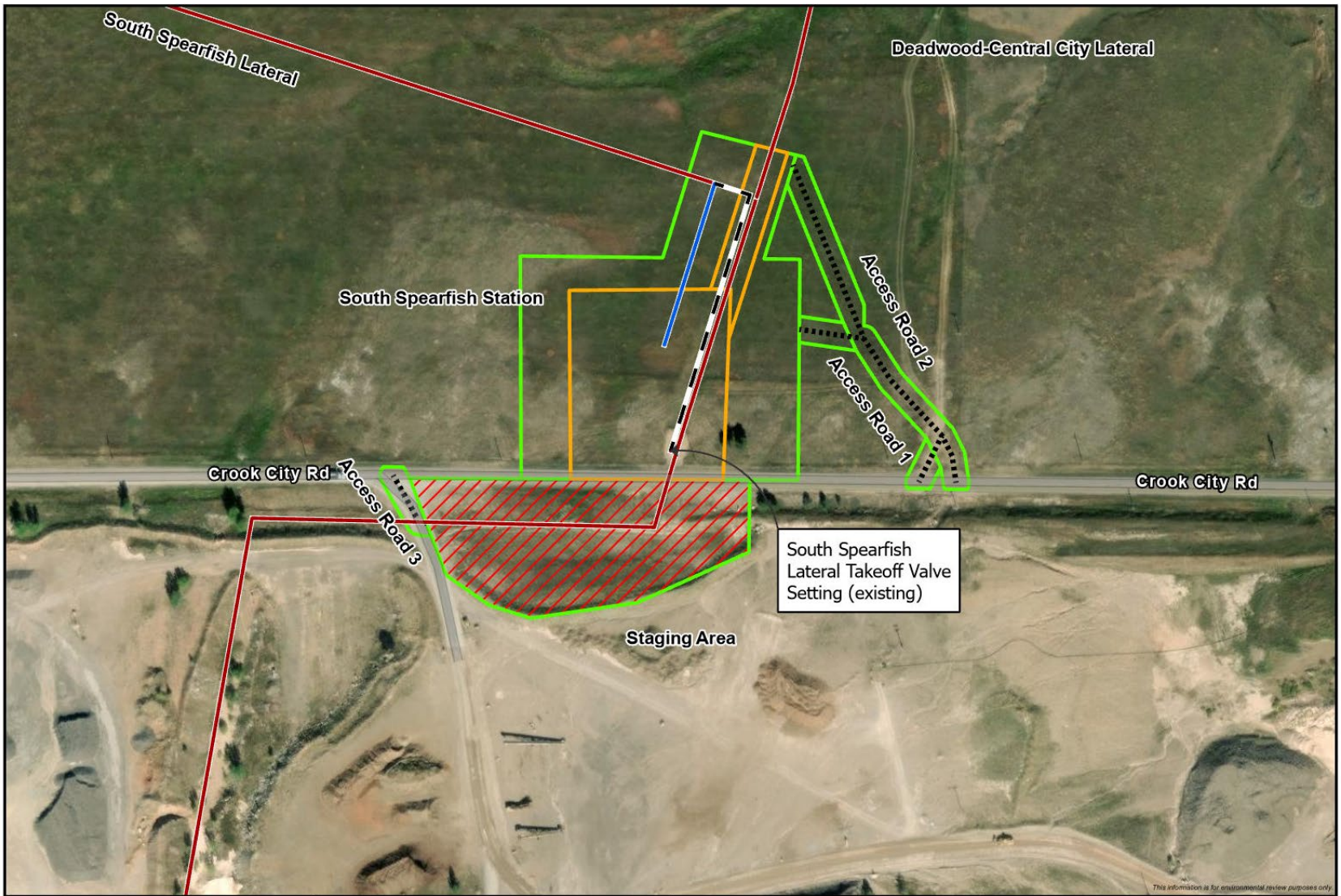
- remove existing pressure regulation and overpressure protection equipment and the valve setting for the Deadwood-Central City Lateral which is adjacent to the Deadwood Mainline Transfer Station on WBI Energy's Line Section 15;
- increase the maximum allowable operating pressure of the 8-inch-diameter Deadwood-Central City Lateral from the Deadwood Mainline Transfer Station to the proposed South Spearfish Station from 200 pounds per square inch gauge (psig) to 470 psig;
- install two pig launcher/receivers,⁸ one at each end of the updated Deadwood-Central City Lateral;
- construct a new South Spearfish Station adjacent to the existing South Spearfish Lateral Takeoff Valve Setting. The new station would contain the relocated South Spearfish Town Border Station and the new Deadwood Lateral Transfer Station;
- relocate approximately 500 feet of the South Spearfish Lateral adjacent to the South Spearfish Town Border Station and the existing South Spearfish Lateral Takeoff Valve Setting; and
- abandon by sale to Montana-Dakota Utilities Company the existing 5.5-mile-long 4-inch-diameter South Spearfish Lateral and certain equipment at the existing South Spearfish Town Border Station upon the commissioning of the new South Spearfish Station.

⁸ A "pig" is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes. A pig launcher/receiver are facilities where pigs are inserted/retrieved from the pipeline.

The general location of the Project facilities are shown in figure 1.

Figure 1: Project Location Map





This information is for environmental review purposes only.

	<p>Feet 1:2,400</p>	<ul style="list-style-type: none"> — Existing WBI Pipeline — Relocated South Spearfish Lateral Abandoned In Place Access Road Centerline 	<ul style="list-style-type: none"> Operational Footprint Construction Footprint Staging Area
	<p style="text-align: center;">South Spearfish Station South Spearfish Expansion Project WBI Energy Transmission Inc. Lawrence County, South Dakota</p>		

South Spearfish Station
South Spearfish Expansion Project
 WBI Energy Transmission Inc.
 Lawrence County, South Dakota



	<p>0 75 150 Feet 1:2,400</p>	<ul style="list-style-type: none"> — Existing WBI Pipeline Operational Footprint 	<div style="display: flex; justify-content: space-between; align-items: center;"> <div data-bbox="1018 1339 1165 1388"> </div> <div data-bbox="1207 1291 1669 1396"> <p>Deadwood Mainline Transfer Station South Spearfish Expansion Project WBI Energy Transmission Inc. Lawrence County, South Dakota</p> </div> <div data-bbox="1753 1339 1816 1396"> </div> </div>
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Deadwood-Central City Lateral Takeoff Valve Setting

To facilitate the uprate of the Deadwood-Central City Lateral, the existing pressure regulation and overpressure protection equipment for the lateral would be removed and rebuilt approximately 4.7 miles west at the end of the uprated Deadwood-Central City Lateral. The existing pressure regulation and overpressure protection equipment is at the Deadwood-Central City Lateral Takeoff Valve Setting adjacent to the Deadwood Mainline Transfer Station in Lawrence County.

Uprate of the Deadwood – Central City Lateral

WBI Energy would uprate approximately 4.7 miles of the 8-inch-diameter Deadwood-Central City Lateral from a maximum allowable operating pressure (MAOP) of 200 pounds per square inch gauge (psig) to 470 psig between the Deadwood Mainline Transfer Station and the proposed South Spearfish Station. As part of the uprate to the lateral, a westbound 8-inch-diameter pig launcher/receiver⁹ would be installed within the boundary of the Deadwood Mainline Transfer Station.

South Spearfish Station

The South Spearfish Station would be constructed and operated on approximately 2.0 acres in Section 26, Township 6 North, Range 3 East in Lawrence County. The station would include the Deadwood Lateral Transfer Station, the 8-inch-diameter eastbound pig launcher/receiver for the Deadwood-Central City Lateral, the South Spearfish Town Border Station, and appurtenant facilities. WBI Energy would construct an approach from the Crook City Road to the facility. A security fence would be installed around the station.

Deadwood Lateral Transfer Station

WBI Energy proposes to construct a transfer station within the South Spearfish Station boundaries. The station would include regulation and overpressure protection equipment to reduce the upstream flowing pressure of the uprated Deadwood-Central City Lateral from an MAOP of 470 psig to an MAOP of 200 psig for the remaining approximately seven miles of the Deadwood-Central City Lateral. The equipment would be installed within a new building.

South Spearfish Lateral and South Spearfish Town Border Station (Abandonment)

WBI Energy would abandon by sale to Montana-Dakota the approximately 5.5 mile 4-inch diameter South Spearfish Lateral and certain town border station equipment and land at the existing South Spearfish Town Border Station upon the commissioning of the new South Spearfish Town Border Station. According to WBI Energy, no additional land is available to

⁹ A “pig” is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes. A pig launcher/receiver is an aboveground structure where pigs are inserted/retrieved from the pipeline.

rebuild the station near its current location. WBI Energy would remove the remaining town border station equipment. No ground disturbance would be required for either the sale or the removal of equipment. Prior to the sale, WBI Energy would relocate approximately 500 feet of the South Spearfish Lateral, including the South Spearfish Lateral Takeoff Valve Setting, that parallels the existing Deadwood-Central City Lateral to provide a minimum 50-foot offset between the two laterals. Approximately 500 feet of existing 4-inch-diameter pipeline would be purged, pigged, and capped for abandonment in place. The abandonment of the South Spearfish Lateral would commence at the new South Spearfish Station and terminate at the existing South Spearfish Town Border Station.

6.0 LAND REQUIREMENTS

Construction of the Project would affect approximately 8.1 acres of land, including temporary workspace for construction of pipeline and aboveground facilities, staging area, and access roads. Following construction, approximately 4.7 acres would revert to pre-construction conditions and uses. The remaining approximately 3.4 acres, including the permanent pipeline easement and aboveground facility sites, would be retained for permanent operation of the Project. Table 1 provides the total acres of land required temporarily for construction and permanently for operation of the pipeline and aboveground facilities.

Table 1 Summary of Land Requirements Associated with the South Spearfish Project		
Facility	Land Affected During Construction (acres) ^a	Land Affected During Operation (acres) ^b
Project Facilities		
South Spearfish Lateral Segment Relocation	0.0	0.0
South Spearfish Station (new)	4.0	2.0
Deadwood Mainline Transfer Station (existing)	1.3	1.3
Staging Area	2.0	0.0
Access Road 1	0.1	0.0
Access Road 2	0.5	0.0
Access Road 3	0.1	0.0
Project Total	8.1	3.4
^a Land affected during construction is inclusive of operation impacts (permanent). ^b Land affected during operation consists only of new permanent impacts.		

7.0 ABANDONMENT AND CONSTRUCTION PROCEDURES

WBI Energy would adhere to applicable permit conditions outlined by the federal, state, and county agencies for the Project. WBI Energy proposes to implement the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (FERC Plan), *Wetland and Waterbody Construction and Mitigation Procedures* (FERC Procedures), and *Plan for the Unanticipated Discovery of Paleontological Resources during Construction*.

WBI Energy would also adhere to the following plans:

- Spill Prevention Control and Countermeasure Plan
- Plan for Unanticipated Discovery of Contaminated Environmental Media
- Noxious Weed Management Plan
- Plan for Unanticipated Discovery of Historic Properties or Human
- Plan for Unanticipated Discovery of Paleontological Resources During Construction
- Fugitive Dust Control Plan

WBI Energy would contract an Environmental Inspector (EI) for the Project. The EI would have the authority to start and stop any work activity, oversee proper installation of erosion control and pollution prevention measures, evaluate the effectiveness of such measures, and ensure all applicable environmental conditions are satisfied. The EI would be present on-site throughout all phases of construction. WBI Energy would also submit weekly progress reports to FERC detailing task completion status, current and upcoming Project activities, and associated photographs. FERC staff would maintain compliance oversight of the Project during construction and restoration activities, until restoration is deemed successful.

It is common for a project proponent to require minor modifications (e.g., minor changes in workspace configurations) during construction activities. Any such modifications for WBI Energy's Project would be subject to review and approval from FERC and any other applicable permitting/authorizing agencies with jurisdiction. WBI Energy would operate and maintain the proposed facilities in compliance with the Commission's siting and maintenance regulations in 18 CFR 380.15. Project facilities would be marked and identified in accordance with applicable regulations.

8.0 CONSTRUCTION SCHEDULE

WBI Energy proposes to start construction activities on June 1, 2024, with an anticipated in-service date of November 1, 2024. In general, construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. However, hydrostatic testing operations, critical tie-ins, and aboveground facility construction may occur up to 24 hours daily, including on Sundays and federal holidays. WBI Energy estimates the duration of construction for the proposed pipeline and aboveground facilities would be approximately 5 months between June and November, 2024. The pipeline relocation on the South Spearfish Lateral would occur as a single spread, with one contractor crew completing the pipeline relocation. Separate crews would conduct aboveground and belowground work at the remaining facilities.

9.0 PERMITS, APPROVALS, AND REGULATORY CONSULTATIONS

Table 2 provides a list of known federal, state, and local permits for the Project. WBI Energy would be responsible for obtaining all permits and approvals required for the Project regardless if they appear in this table.

Table 2: Permits and Approvals		
Permit/Approval	Administering Agency	Status
Section 7(c) ^a	Federal Energy Regulatory Commission	Pending
Endangered Species Act Section 7 consultation	United States Fish and Wildlife Service	Completed July 21, 2023
Section 106 of the National Historic Preservation Act	National Park Service	Concurrence with design specifications, August 2023
State of South Dakota		
Section 106 of the National Historic Preservation Act	South Dakota State Historical Society – Historic Preservation Office	Concurrence with design specifications, September 2023
Construction General Permit for Stormwater	South Dakota Department of Agriculture and Natural Resources	Pending
Temporary Discharge Permit	South Dakota Department of Agriculture and Natural Resources	Pending
^a No wetlands or waterbodies would be impacted by the Project. Therefore, Water Quality Certification under Section 401 of the Clean Water Act is not required.		

B. ENVIRONMENTAL ANALYSIS

This section of the EA describes the affected environment as it currently exists and discusses the environmental consequences of the proposed Project. The discussion is organized by resource topic. Based on our review of the Project, the following resources are either not present or would not be affected by the Project, and they are not discussed further:

- wetlands, surface waters, and fisheries; and
- floodplains.

The environmental consequences of facility construction would vary in duration. Four levels of impact duration were considered: temporary, short-term, long-term, and permanent. Temporary impacts generally occur during construction with the resource returning to pre-construction condition almost immediately afterward. Short-term impacts could continue up to three years following construction. Impacts were considered long-term if the resource would require more than three years to recover. A permanent impact could occur as a result of any activity that modifies a resource to the extent that it would not return to pre-construction conditions (e.g., a new building). When determining the significance of an impact, we consider the duration of the impact as well as the geographic, biological, and/or social context in which the effects would occur, and the intensity (e.g., severity) of the impact.

1.0 GEOLOGY

The Project locations are within the Black Hills section of the Great Plains physiographic province (Fenneman and Johnson, 1946; Trimble, 1980). The Black Hills section includes steeply sloping rocky ridges and mountains up to 6,600 feet in elevation, interspersed with gently rolling terrain. The bedrock in the northern Black Hills consists of sedimentary rocks. The surficial geology overlying the bedrock generally consists of weathered rock sediments derived from Cretaceous-age shale and sandstone.

In the South Spearfish Station and South Spearfish Lateral Project areas the terrain is generally level to gently sloping with elevations of about 4,120 feet above mean sea level (amsl) to about 4,200 feet amsl. The geologic formation underlying these work areas consist of siltstone and sandstone with minor limestone elements.

In the Deadwood Mainline Transfer Station Project area, the elevations range from about 3,560 feet amsl to about 3,600. The geologic formation underlying these work areas consist of shale and siltstone with some sandstone and claystone elements.

1.1 MINERAL RESOURCES

Economic mineral resources in South Dakota include mica, sand and gravel, gemstones, gold and silver, and oil and natural gas. No mica or gemstone mines were identified within 1 mile of the Project area. In addition, the sedimentary rocks deposited in the shallow inland sea during the Mesozoic era produce mineral resources for industrial and commercial purposes (U.S. Geological Survey [USGS], 2022a).

Four active sand and gravel or limestone quarries were identified within 0.5 mile of the Project workspaces (South Dakota Department of Agriculture and Natural Resources [SDDANR], Mineral and Mining Program [SDMMP], 2022). The boundary of the nearest facility is across Crook City Road to the south of the proposed South Spearfish Station, and about 95 feet from the South Spearfish Station staging area. The other quarries are 1,150 feet or more from the Project. Gold and silver exploration drilling is proposed near Lead, South Dakota, about 5 miles or more from the Project workspaces. However, no active gold or silver mines are in the Project areas. No oil or natural gas wells were identified within 1 mile of the Project area. Given that the Project would involve limited ground disturbance and the distance to existing mineral extraction, we conclude that availability of, and access to, mineral resources would not be impacted as a result of the Project.

1.2 GEOLOGIC HAZARDS

Geologic hazards are natural, physical conditions that can result in damage to land and structures and injury to people. Such hazards are typically seismic-related, including earthquakes and soil liquefaction. These hazards are discussed below. Other geologic hazards, such as landslides, ground subsidence, and flooding are also discussed below.

Based on USGS seismic hazard probability mapping, there is a 2 percent probability of an earthquake with an effective peak ground acceleration of between 0.04 and 0.10 gravity being exceeded in 50 years in the Project locations (Ruckstaes and Petersen, 2019). For reference, a peak ground acceleration of 0.10 gravity is generally considered the minimum threshold for damage to older structures or structures not constructed to withstand earthquakes.

Two earthquakes with magnitudes greater than or equal to 2.5 have occurred within 10 miles of the Project area since 1966 (USGS, 2023). A 2.7 magnitude earthquake occurred in 1993 about 5 miles south of the South Spearfish Station, and a 2.5 magnitude earthquake occurred in 1991 about 7 miles southwest of the South Spearfish Station. There are no faults that are active within the Quaternary period mapped within the Project area (USGS 2022b). Given the low probability of an earthquake with a peak ground acceleration of 0.10 or above and the low magnitude of earthquakes within the Project area, we conclude the risk of a substantial damage to the proposed Project facilities resulting from an earthquake or seismic ground faulting is not significant.

Soil liquefaction is a phenomenon often associated with seismic activity in which saturated, non-cohesive soils temporarily lose their shear strength (i.e., behave like viscous liquid) when subjected to ground shaking. Non-cohesive soils (e.g., sand), near-surface saturation, and seismicity are necessary for soil liquefaction to occur. The water table typically occurs more than 80 inches below the land surface in the Project area (U.S. Department of Agriculture's Natural Resources Conservation Service [NRCS] Web Soil Survey, 2023). The predominant soils in the Project workspaces are silty to loamy, with well drained gravel and cobbles within the finer soils. Given the low risk of earthquake-induced ground movement in the Project locations and the predominantly fine-grained soils, we conclude that the risk of impacts on the Project facilities from soil liquefaction is not significant.

“Landslide” is a general term for downslope mass movement of soil, rock, or a combination of materials on an unstable slope. The principal types of movement are falling, sliding, and flowing, but combinations of these are common. According to South Dakota

Department of Public Safety (DPS) Hazard Identification and Risk Assessment data, the South Spearfish Station is in an area with a low landslide incidence (less than 1.5 percent of the area affected), and the Deadwood Mainline Transfer Station is in an area with a high landslide incidence (greater than 15 percent of the area affected) (South Dakota Department of Environment and Natural Resources, 2015). However, the Deadwood Mainline Transfer Station workspaces are gently sloping, with slopes of 5 to 10 percent occurring around the perimeter of the Project workspace as short embankments. The South Spearfish Station workspaces include steep slopes of up to 30 percent; however, these slopes are associated with short, man-made perimeter berms at the limestone quarry property that is adjacent to the staging area. No ground disturbance is proposed near these berms. We conclude that the risk of landslides impacting the Project is not significant.

Ground subsidence can occur due to natural geologic or human processes, such as karst formation in soluble carbonate or evaporite bedrock, underground mine collapse, or withdrawal of fluids such as groundwater. Evaporites and limestone are mapped near the land surface near Spearfish (Weary and Doctor, 2014; Thielen-Willige, 2018). The Spearfish Formation may exhibit karst features such as dolines and sinkholes due to the dissolution of gypsum and anhydrite. However, these features were not identified within the Project workspaces. Given the limited ground disturbance proposed for the Project and implementation of the FERC Plan and Procedures to minimize impacts from erosion, we conclude the likelihood of ground subsidence impacting the Project is not significant.

1.3 PALEONTOLOGICAL RESOURCES

Paleontological resources are the fossilized remains of prehistoric plants and animals, as well as the impressions left in rock or other materials. The Project workspaces would overlie several potentially fossil-bearing formations including the Mowry Shale, Newcastle Sandstone, and Skull Creek Shale. The proposed ground disturbance for the Project would be minimal. However, if paleontological resources are discovered during construction, WBI Energy would manage them according to procedures in the Project *Plan for the Unanticipated Discovery of Paleontological Resources during Construction*. Work would be stopped, and potential paleontological resources would be left undisturbed. The discovery would be reported to the EI or WBI Energy representative, who would contact the landowner and state agencies to determine the appropriate measures to be taken. Given the minimal ground disturbance and WBI Energy's implementation of its paleontological plan, we conclude paleontological resources would not be significantly impacted by the Project.

2.0 SOILS

Based on the NRCS Web Soil Survey, the Project work areas are comprised of silty and loamy soils with localized intermixed gravel and cobbles derived from residuum of weathered siltstone, sandstone, or limestone (NRCS, 2006). Some of the mapped soils within the Project area are described as having characteristics that limit suitability for development. These characteristics are: prime farmland or farmland of statewide importance, soils susceptible to erosion by water, soils with revegetation concerns, rocky soils, or shallow bedrock.

About 3.9 acres of soils designated as prime farmland and farmland of statewide or local importance are present within the proposed Project workspaces, of which 2.5 acres would be permanently impacted by conversion to industrial land use within new above-ground facilities. None of these soils that would be temporarily or permanently impacted by the Project are currently being used for agricultural purposes. Therefore, we conclude that the Project's impact on prime farmland and farmland of statewide or local importance soils would not be significant.

A total of 2.5 acres of soils in the proposed Project workspaces are described as being susceptible to erosion by water, of which 0.3 acre would be permanently impacted within new above-ground facilities. No soils with high wind erodibility are present within the Project area. Slopes within the Project area are flat to gently sloping, with no steep slope erosion hazards anticipated. WBI Energy would install temporary erosion controls in accordance with the FERC Plan and Procedures prior to initial ground disturbance, and would complete final cleanup and installation of permanent erosion control measures within 20 days after final grading in each area.

About 1.6 acres of soils with revegetation limitations are present within the Project workspaces and would be temporarily impacted during construction activities. No soils with revegetation limitations would be permanently impacted by the Project. Successful restoration and revegetation are important for maintaining soil productivity and to protect the underlying soil from potential loss through erosion. Following final grading and cleanup, WBI Energy would condition disturbed areas outside permanent aboveground facility boundaries for planting, including soil amendments as needed, in accordance with the FERC Plan and Procedures. WBI Energy would monitor vegetation establishment until final stabilization is achieved. About 4.2 acres of rocky soils are present in the Project workspaces and about 3.7 acres of soils in the Project workspaces are underlain by shallow bedrock (within 60 inches of the land surface). Of these soils, 0.8 acre of rocky soils and 1.8 acres of shallow bedrock soils would be permanently impacted within new above-ground facilities. Excavation and grading activities could result in the introduction of rock into the topsoil layer. WBI Energy would segregate topsoil and subsoil during grading, which would limit potential for rock to be introduced into the topsoil. WBI Energy would remove excess rock from surface soils disturbed by construction such that the size, density, and distribution of rock on the right-of-way would be similar to the adjacent undisturbed areas.

Should bedrock be encountered during construction, WBI Energy would minimize the mixing of excavated bedrock with backfill and would replace rock in the trench no higher than the original bedrock profile. Most of the bedrock crossed by the Project is not anticipated to be ripped by standard construction equipment. Special construction equipment would be used because blasting is not feasible close to the existing infrastructure.

Based on a review of publicly available databases of contaminated sites, no potential sources of soil or groundwater contamination were identified within 0.25 mile of the Project area (USEPA, 2023a). In the event that soil or groundwater contamination were encountered during construction activities, WBI Energy would follow procedures from the Project *Spill Prevention, Control, and Countermeasure Plan* (SPCCP), such as stopping work in the area of contamination, assessing the contamination, and notifying appropriate local, state, and federal agencies. Accidental spills of hazardous fluids such as oil, gasoline, or hydraulic fluids, could potentially impact groundwater if allowed to infiltrate through soils into the water table. To

reduce the potential for soil contamination, Transco would implement the SPCCP, which includes measures to avoid or minimize the potential for accidental releases and measures to clean up any releases.

We acknowledge that vegetation or topographic concerns may persist during restoration due to soil settlement, weather conditions, and slow growing seed mixes. However, given WBI Energy's proposed mitigation measures and that the workspaces would be regraded to, as close as practicable, their original contours and revegetated according to the NRCS and landowner requirements, we conclude impacts on soils would be short-term and not significant.

3.0 GROUNDWATER RESOURCES

The Project workspaces overlie the Inyan Kara aquifer, which consists of sandstone occurring about 140 feet below the land surface and ranging in thickness from about 135 feet to 900 feet (Strobel et al., 2000). Groundwater withdrawals in the Project area are predominantly withdrawn from the Madison and Minnelusa aquifers, and are the source of the City of Spearfish municipal water supply and much of Lawrence County.

The U.S. Environmental Protection Agency (USEPA) oversees the Sole Source Aquifer Protection Program to protect high production aquifers that supply 50 percent or more of the region's water supply and for which there are no reasonably available alternative drinking water sources should the aquifer become contaminated (USEPA, 2023a). No Project locations are within Sole Source Aquifers. No private or public water supply wells, wellhead protection areas, or springs are within 150 feet of the proposed Project workspaces (SDDANR, 2022b). No public water supply intakes are within 1 mile of the Project locations (SDDANR, 2023a; USEPA, 2023b).

Dewatering of the South Spearfish Lateral pipeline trench may be necessary if shallow groundwater is encountered within the excavation zone. Groundwater pumped out of the trench would be discharged in accordance with the FERC Plan and Procedures and applicable permits. The potential impact of dewatering would be minimized by discharging the pumped water to well-vegetated areas or to temporary discharge structures that promote infiltration and minimize runoff.

As described in the soils section, no potential sources of groundwater contamination were identified within 0.25 mile of the Project area (USEPA, 2023a). In the event that groundwater contamination were encountered during construction activities or should any hazardous fluids be inadvertently spilled, WBI Energy would follow procedures from the Project SPCCP to avoid or minimize the potential for accidental releases and measures to clean up any releases.

Given WBI Energy's mitigation measures, including implementation of its SPCCP and our Plan and Procedures, we conclude that impacts from Project construction and operation on groundwater resources would not be significant.

3.1 WATER USE

Following construction activities, the facilities would be hydrostatically pressure tested before being placed into service. An estimated 2,000 gallons of water would be required for dust

suppression, and an estimated 300 gallons of water would be required for hydrostatic testing of the new facilities. Water for the dust suppression and hydrostatic testing would be obtained from municipal water sources. The water used for hydrostatic testing may be treated with Vitamin-C (Ascorbic acid) for de-chlorination purposes. This would not affect permitting for disposal of the water. WBI Energy would dispose of hydrostatic test water in well vegetated upland areas, according to FERC’s Procedures. Given the limited volume of water that WBI Energy would use, it’s de-chlorinating of the water, and its use of our Procedures to discharge test water, we conclude that proposed water use for the Project would not have significant impacts on the groundwater or other water supply resources in the Project area.

4.0 VEGETATION AND WILDLIFE

4.1 VEGETATION

The Project facilities are within the Black Hills Foothills Level IV ecoregion. Vegetative communities within the Project area are comprised of herbaceous open lands dominated by native grass species and hay. Construction activities would not affect any special-status plants or vegetation communities of special concern.

Table 3: Breakdown of Land Requirements

	Open Land		Developed		Total ^a	
	Construction	Operation	Construction	Operation	Construction	Operation
Above Ground Facilities ^b	4.9	3.0	2.4	0.4	7.3	3.4
Access Roads	0.5	0.0	0.2	0.0	0.7	0.0
Project Totals^a	5.4	3.0	2.6	0.4	8.1	3.4

^a The totals may not reflect the sum of the addends due to rounding.
^b The relocated pipeline is within the operational footprint of aboveground facility

WBI Energy would require up to 8.1 acres of workspace during construction and 3.4 acres for operation.¹⁰ Aboveground facility construction would require 3.0 acres of herbaceous open land to be converted to un-vegetated developed land. WBI Energy would regrade and restore all temporary workspaces to as near pre-construction conditions as practicable. All temporarily disturbed open land (2.4 acres) would be restored in accordance with the FERC Plan.

WBI Energy would adhere to its *Noxious Weeds Management Plan*¹¹ to prevent, mitigate, and control the spread of noxious weeds and invasive plants. Given that the impacts within the temporary workspaces would be short-term and restored to an herbaceous state and the limited acreage of permanent impacts, we have determined that impacts on vegetation from construction and operation of the Project would not be significant.

¹⁰ A portion of the Project and temporary workspace (2.6 acres) would be constructed on developed, un-vegetated land.

¹¹ Accession number 20230828-5316 – Appendix II-3A

4.2 WILDLIFE

The herbaceous open land within the Project area may provide food, protective cover, and young-rearing habitat for multiple species including, but not limited to, mule deer, white-tailed deer, bison, pronghorn, yellow-bellied marmot, mountain lion, bighorn sheep, coyote, wild turkey, and mountain bluebird (USDA, 2021). WBI Energy did not identify any unique or sensitive wildlife resources in the Project area. The Black Hills National Forest is approximately one mile south of the Project, and it consists of 1.2 million acres of remote undisturbed habitat for many of the species common to the region.

Equipment movement, human presence, ground disturbance, lighting, and noise would temporarily disturb wildlife during Project construction. Aboveground facilities would result in about 2.4 acres of permanent habitat loss. Temporary vegetation clearing and permanent conversion of habitat would result in displacement of wildlife to similar habitat adjacent to the Project area.

Construction would increase the rates of stress, injury, and mortality experienced by local wildlife. The Project's staging area partially overlaps an active quarry where heavy equipment operates, lighting is used, and humans are present during operations. Further, the Project is an expansion of similar facilities. Wildlife occurring in the area would likely already be exposed to stressors like those caused by construction and operation of the Project. WBI Energy would return temporary workspaces to as near as pre-construction conditions as practicable, upon completion. Given the short duration of construction (5 months) and abundance of nearby, undisturbed habitat, we conclude that the Project would have minor, short-term impacts on wildlife during construction. Given the existing aboveground facilities, and active quarry in the vicinity of the Project, we conclude that the Project would have minor, long-term impacts on wildlife during operation.

4.3 MIGRATORY BIRDS

Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S. Code [U.S.C.] § 703-711); bald and golden eagles are additionally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. § 668-668d). Executive Order (EO) 13186 (66 FR 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse impacts on migratory birds through enhanced collaboration with the U.S. Fish and Wildlife Service (FWS). EO 13186 was issued in part to ensure that environmental analyses of federal actions assess the impacts of these actions on migratory birds. It also states that emphasis should be placed on species of concern, priority habitats, and key risk factors, and it prohibits the take of any migratory bird without authorization from the FWS.

The Migratory Bird Treaty Act, as amended, prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. In March 2011, FERC entered into a Memorandum of Understanding with the FWS, which focuses on avoiding or minimizing adverse impacts on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two agencies.

WBI Energy identified 23 bird species of conservation concern that would potentially occur in the Project area including bald eagles covered under the Bald and Golden Eagle Protection Act. Birds that may occur in the Project area are included in table 4.

Baird's sparrow	Bald eagle	Black tern	Black-billed cuckoo	Bobolink
California gull	Chestnut-collared longspur	Ferruginous hawk	Franklins gull	Grasshopper sparrow
Lark bunting	Lewis's woodpecker	Long-eared owl	Marbled godwit	Mountain plover
Northern harrier	Prairie falcon	Short-eared owl	Sprague's pipit	Thick-billed longspur
Burrowing owl	Western Grebe	Willet		

Potential impacts of construction on migratory birds and their habitats include clearing of vegetation that provides migratory bird habitat and increased audible noise. WBI sited the Project outside of forested areas that serve as suitable habitat for several migratory bird species. Therefore, no tree clearing is proposed. The Project site is surrounded by similar open land habitat. Individuals potentially present during construction would likely relocate to similar adjacent areas due to construction noise. Following construction, WBI Energy would allow approximately 58 percent of the Project area to return to pre-construction conditions. Given the short duration of construction, the Project being sited largely with existing facilities, availability of similar habitat, and WBI Energy's willingness to allow most of the project area to revert back to pre-construction conditions, we conclude that the Project would have temporary to short-term and not significant impacts on migratory bird species.

4.4 SPECIAL STATUS SPECIES

FERC, as the lead federal agency, is required by section 7 of the Endangered Species Act to ensure that the Project would not jeopardize the continued existence of a federally listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. To assess the potential occurrence of federally listed threatened and endangered species and species protected and managed by the state of South Dakota, WBI Energy referred to the U.S. Fish and Wildlife Service's (FWS) Information for Planning and Consultation system, and consulted with the South Dakota department Game, Fish, and Parks.

The Project is within the range of one federally listed endangered species [northern long-eared bat (NLEB)], one threatened species (Rufa red knot), one proposed endangered species (tri-colored bat), and one candidate species (monarch butterfly). On July 19, 2023, Environmental Resources Management (ERM), on behalf of WBI Energy, sent the FWS a *Section 7 consultation Letter* outlining habitat assessments that supported *no effects* determinations for the NLEB and tricolored bat and a *may affect, but not likely to adversely affect* determination for the Rufa red knot.¹² In comments provided via email dated July 21,

¹² Accession number 20230828-5316 – Appendix II-3B

2023, the FWS indicated that they do not provide concurrence for *no effect* determinations. However, given that the tricolor bat often occupies the same areas as the NLEB, the same effects determination should apply if the tricolored bat becomes listed during the construction of the Project. The FWS also indicated that Rufa red knot likely does not occur in the Project area and suggested that a *no effect* determination could apply to this species as well. Given that there would be no tree clearing and the Project would occur in open land, adjacent to existing facilities, we have determined that the Project would have *no effect* on any federally listed endangered or threatened species. Therefore, consultation is complete.

Monarch butterflies prefer open areas where there is milkweed and other flowering plants to provide nectar as food for adults. Caterpillars will only feed on milkweed foliage (FWS, 2022). WBI conducted a field habitat assessment of the vegetation within the Project area in August 2022 and identified nine patches of showy milkweed that occupy less than 0.1 acre.¹³ Given the limited acreage that would be impacted, that temporary impacts would revert to pre-construction conditions in accordance with FERC's Plan, implementation of WBI Energy's *Noxious Weeds Management Plan*, and there is substantial suitable habitat surrounding the Project area, we conclude the Project is not likely to jeopardize the continued existence of the monarch butterfly.

5.0 LAND USE, RECREATION, AND VISUAL IMPACTS

5.1 LAND USE

Temporary impacts on land use would result from construction of the proposed Project. The land associated with the temporary workspace outside permanent aboveground facility boundaries would be restored to pre-disturbance conditions and uses. WBI Energy would conduct restoration activities in accordance with the FERC Plan to minimize potential impacts. Construction of the Project would affect approximately 8.1 acres of land, including temporary workspace needed for construction of pipeline and aboveground facilities, staging area, and access roads. Following construction, approximately 4.7 acres would revert to pre-construction conditions and uses. The remaining approximately 3.4 acres, including the permanent pipeline easement and aboveground facility sites, would be retained for permanent operation of the Project. A table of land usage requirements is given in table 2.

5.2 RECREATIONAL RESOURCES

The proposed South Spearfish Station would be within the southeast corner of the southern section of the Frawley Ranch National Historic Landmark and includes WBI Energy's existing South Spearfish Lateral Takeoff Valve Setting. Frawley Ranch totals more than 4,750 acres, consisting of six historic homesteads, a recreational vehicle park, Elkhorn Ridge Resort, home sites, and a golf course (NPS 2020). Recreational facilities in this area are more than 1.5 miles from the proposed Project.

¹³ Accession number 20240108-5154

The Black Hills National Forest at its closest point to the Project is approximately 1 mile south of the existing South Spearfish Lateral Takeoff Valve Setting.

Due to the distance between the historic landmarks and the South Spearfish Station area, as well as the relocation of the existing South Spearfish Lateral Takeoff Valve Setting, impacts on recreational users would be minor and would be limited to the period of active construction. Further discussion on potential impacts on this landmark are discussed in Section 6.0.

5.3 VISUAL RESOURCES

The visual character of the existing landscape is defined by historic and current land uses such as open land and development. Modifications at the existing Deadwood Mainline Transfer Station would take place within the existing fenced facility boundary. Installations at the South Spearfish Station (i.e., the South Spearfish Town Border Station and Deadwood Lateral Transfer Station) would require an expansion of the current facility boundary. However, because there is a residence across the street from the Deadwood Mainline Transfer Station, the new pig launcher/reciever would be visible. In order to ensure that visual impacts on this residence are minimized, we recommend that:

Prior to construction at the Deadwood Mainline Transfer Station, WBI Energy should file with the Secretary of the Commission (Secretary) a visual screening plan for review and written approval by the Director of the Office of Energy Projects (OEP), or the Director's designee, to minimize visual impacts on the nearby residences at the Deadwood Mainline Transfer Station.

Most visual and aesthetic impacts associated with the Project would be limited to the period of active construction as a result of construction equipment, personnel, and disturbed soil. Aboveground facilities associated with the Project are primarily in areas already developed and used for industrial purposes. At the South Spearfish Station, WBI Energy would utilize non-reflective paint on buildings; and install a chain link fence with beige-colored privacy slats to conceal the Project infrastructure. For these reasons, and our recommendation at the Deadwood Mainline Transfer Station, we conclude minimal visual and aesthetic impacts are anticipated for the Project.

6.0 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act, as amended, requires the FERC to consider the effects of its undertakings on properties on or eligible for listing on the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation an opportunity to comment. WBI Energy, as a non-federal party, is assisting us in meeting our obligations under Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR 800.

WBI Energy contacted the following Native American tribes, providing a Project description and mapping: Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Blackfeet, Cheyenne and Arapaho (Oklahoma), Cheyenne River Sioux, Crow Creek Sioux,

Crow, Eastern Shoshone, Flandreau-Santee Sioux, Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Lower Brule Sioux, Northern Arapaho, Northern Cheyenne, Oglala Sioux, Omaha Tribe of Nebraska, Oteo-Missouria, Ponca Tribe of Nebraska, Rosebud Sioux, Santee Sioux Tribe of Nebraska, Sisseton-Wahpeton-Oyate, Spirit Lake, Standing Rock Sioux, Three Affiliated Tribes (Madan, Hidatsa, and Arikara Nation), Turtle Mountain Band of Chippewa, Winnebago Tribe of Nebraska, and Yankton Sioux. No comments have been received. We sent our NOS to these same tribes in addition to the Apache tribe of Oklahoma and the Fort Belknap Indian Community of the Fort Belknap Reservation of Montana. No responses to our NOS have been received from the tribes.

WBI Energy completed cultural resources surveys for the Project and provided a Section 106 report to the FERC and the South Dakota SHPO. The Project area of potential effects (APE) totals 8.1 acres between two sites; the visual APE extends up to 0.5-mile from the Project APE. A review of environmental and background information revealed no previously documented archaeological sites within the APE; however, the Frawley Ranch Historic District, an NRHP listed property and a National Historic Landmark (NHL), is within the direct and visual Project APE.

WBI Energy conducted archaeological and architectural field surveys September 27 and 29, 2022. The Frawley Ranch Historic District was identified within the direct and visual Project APE. No further archaeological or architectural resources were identified within the Project APE.

As an NHL may be directly or adversely affected by the Project, the National Park Service (NPS) was notified and involved for comment under Section 110(f) of the National Historic Preservation Act. The NPS provided remarks on August 1, 2023, to which the South Dakota SHPO agreed on August 17, 2023, and requested additional information regarding the physical characteristics of the South Spearfish Station and its visibility from the NHL.

Following the Bureau of Land Management's *The Use of Color Concealment of Facilities*, WBI Energy would utilize "hickory" or "desert sand" non-reflective paint on buildings and install a chain link fence with beige-colored privacy slats to further conceal the Project infrastructure within the NHL's viewshed. On August 28, 2023, the NPS agreed that the Project would not adversely affect the NHL, provided the design recommendations to obscure potential visual intrusions on the NHL are followed.

In a letter dated September 7, 2023, the South Dakota SHPO concurred with the report findings and the recommendation that the proposed Project would have no adverse effect on historic properties, provided the design specifications are followed. The Section 106 consultation documentation with the SHPO was subsequently provided to FERC. We agree with the SHPO and NPS, and conclude that consultation under section 106 is complete.

WBI Energy provided an *Unanticipated Discovery Plan* to address the unanticipated discovery of historic properties and human remains during construction. We find the plan acceptable.

7.0 ENVIRONMENTAL JUSTICE

In conducting NEPA reviews of proposed natural gas projects, the Commission follows Executive Order 12898 and Executive Order 14096, which directs federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority and low-income populations (i.e., environmental justice communities).¹⁴ Executive Order 14008, also directs agencies to develop “programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate- related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.”¹⁵ Environmental justice is “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”¹⁶ The term “environmental justice community” includes disadvantaged communities that have been historically marginalized and overburdened by pollution.¹⁷

Commission staff used *Promising Practices for EJ Methodologies in NEPA Reviews* (Promising Practices),¹⁸ which provides methodologies for conducting environmental justice analyses throughout the NEPA process for this Project. Additionally, consistent with USEPA recommendations, Commission staff used USEPA’s Environmental Justice Screening and Mapping Tool (EJScreen) as an initial screening tool to better understand locations that require further review or additional information regarding minority and/or low-income populations;

¹⁴ Exec. Order No. 12,898, 59 Fed. Reg. 7629, at 7629, 7632 (Feb. 11, 1994); Exec. Order No. 14,096, 88, Fed. Reg. 25251, 25253 (Apr. 21, 2023).

¹⁵ Exec. Order No. 14,008, 86 Fed. Reg. 7619, at 7629 (Jan. 27, 2021).

¹⁶ USEPA, *Learn About Environmental Justice*, <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice> (Aug. 16, 2023). Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. *Id.* Meaningful involvement of potentially affected environmental justice community residents means: (1) people have an appropriate opportunity to participate in decisions about a proposed activity that may affect their environment and/or health; (2) the public’s contributions can influence the regulatory agency’s decision; (3) community concerns will be considered in the decision-making process; and (4) decision makers will seek out and facilitate the involvement of those potentially affected. *Id.*

¹⁷ Exec. Order No. 14,008, 86 Fed. Reg. 7619, at 7629 (Jan. 27, 2021). The term “environmental justice community” also includes, but may not be limited to minority populations, low-income populations, or indigenous peoples. See EPA, EJ 2020 Glossary (July 31, 2023), <https://www.epa.gov/environmentaljustice/ej-2020-glossary>.

¹⁸ Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* (Mar. 2016) (*Promising Practices*), https://www.epa.gov/sites/default/-files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

potential environmental quality issues; environmental and demographic indicators; and other important factors.¹⁹

7.1 MEANINGFUL ENGAGEMENT AND PUBLIC INVOLVEMENT

The CEQ’s *Environmental Justice Guidance Under the National Environmental Policy Act (CEQ Environmental Justice Guidance)*²⁰ and *Promising Practices* recommend that federal agencies provide opportunities for effective community participation in the NEPA decision-making process, including: identifying potential effects and mitigation measures in consultation with affected communities; improving the accessibility of public meetings, crucial documents, and notices; and using adaptive approaches to overcome potential barriers to effective participation. In addition, Executive Order 13985 and Executive Order 14096 strongly encourages independent agencies to “consult with members of communities that have been historically underrepresented in the Federal Government and underserved by, or subject to discrimination in, Federal policies and programs,”²¹ and “provide opportunities for the meaningful engagement of persons and communities with environmental justice concerns who are potentially affected by Federal activities.”²²

There have been opportunities for public involvement during the Commission’s environmental review processes.²³ We recognize that not everyone has internet access or is able to file electronic comments. The Commission’s notices are therefore physically mailed to all parties on the environmental mailing list.

All documents that form the administrative record for these proceedings are available to the public electronically through the internet on the FERC’s website (www.ferc.gov). Anyone may comment to FERC about the Project, either in writing or electronically.²⁴ All substantive environmental comments received prior to issuance of this EA have been addressed within this document.

FERC did not receive any environmental justice comments.

¹⁹ The EPA recommends that screening tools, such as EJScreen, be used for a “screening-level” look and a useful first step in understanding or highlighting locations that may require further review.

²⁰ CEQ, *Environmental Justice: Guidance Under the National Environmental Policy Act 4* (Dec. 1997) (CEQ’s *Environmental Justice Guidance*), <https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf>.

²¹ Exec. Order No. 13985, 86 Fed. Reg. at 7011 (Jan. 20, 2021).

²² Exec. Order No. 14,096, 88, Fed. Reg. 25254 (Apr. 21, 2023).

²³ *See supra* at A.3.

²⁴ The Office of Public Participation (OPP) provides members of the public, including environmental justice communities, landowners, Tribal citizens, and consumer advocates, with assistance in FERC proceedings—including navigating Commission processes and activities relating to the Project. For assistance with interventions, comments, requests for rehearing, or other filings, and for information about any applicable deadlines for such filings, members of the public are encouraged to contact OPP directly at 202-502-6595 or OPP@ferc.gov for further information.

7.2 IDENTIFICATION OF ENVIRONMENTAL JUSTICE COMMUNITIES

According to the CEQ's *Environmental Justice Guidance* and *Promising Practices*, minority populations are those groups that include: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Following the recommendations set forth in *Promising Practices*, the Commission uses the 50 percent and the meaningfully greater analysis methods to identify minority populations. Using this methodology, minority populations are defined in this EA where either: (a) the aggregate minority population of the block groups in the affected area exceeds 50 percent; or (b) the aggregate minority population in the block group affected is 10 percent higher than the aggregate minority population percentage in the county. The guidance also directs low-income populations to be identified based on the annual statistical poverty thresholds from the U.S. Census Bureau. Using *Promising Practices'* low-income threshold criteria method, low-income populations are identified as block groups where the percent of low-income population in the identified block group is equal to or greater than that of the county. A reference community may vary according to the characteristics of the particular project and the surrounding communities. Here, the Commission staff selected Lawrence County, South Dakota, as the comparable reference community to ensure that affected environmental justice communities are properly identified.

Table 5 below identifies the minority populations (by race and ethnicity) and low-income populations within Lawrence County affected by the Project, and the census block groups²⁵ within which the work would take place. We believe the 1-mile radius is sufficient considering the likely concentration of air emissions, noise, traffic, and visual impacts proximal to the proposed South Spearfish Station (including the staging area) and the modified Deadwood Mainline Transfer Station.²⁶ To identify potential environmental justice communities for the analysis presented here, Commission staff used the 2022 U.S. Census American Community Survey²⁷ as the source for race, ethnicity, and poverty data at the census block group level.

As presented in table 5, there are minority and low-income communities within the Project Area. The proposed South Spearfish Station and staging area would be in a block group that is an environmental justice community (Census Tract 9661.01, Block Group 2) based on the low-income thresholds.

²⁵ Census block groups are statistical divisions of census tracts that generally contain between 600 and 3,000 people. U.S. Census Bureau. 2022. Glossary: Block Group. Available online at: https://www.census.gov/programs-surveys/geography/about/glossary.html#par_textimage_4. Accessed November 2023.

²⁶ A 1-mile-radius is also used for meter stations, contractor parking lots, pipeline right-of-way, contractor yards, and workspaces.

²⁷ U.S. Census Bureau, American Community Survey 2022 ACS 5-Year Estimates Detailed Tables, File# B17017, *Poverty Status in the Past 12 Months by Household Type by Age of Householder*, <https://data.census.gov/cedsci/table?q=B17017>; File #B03002 *Hispanic or Latino Origin By Race*, <https://data.census.gov/cedsci/table?q=b03002>.

Table 5 - Minority Populations by Races and Ethnicity and Low-Income Populations in the Project Area											
	RACE AND ETHNICITY COLUMNS										LOW-INCOME COLUMN
State/County/ Census Tract/ Block Group	Total Population	White Alone Not Hispanic (%)	African American (%)	Native American/ Alaska Native (%)	Asian (%)	Native Hawaiian & Other Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)	Total Minority ^a (%)	Below Poverty Level ^b (%)
South Dakota	890,342	80.6	2.2	7.6	1.4	0.1	0.2	3.5	4.4	19.4	10.9
Lawrence County	26,047	89.4	0.7	2.0	0.6	0.1	0.2	3.3	3.8	10.7	11.5
Deadwood Mainline Transfer Station											
Census Tract 9661.01, Block Group 1	2,058	91.0	0.1	0.3	2.9	0.0	0.0	1.8	3.9	9.0	9.7
South Spearfish Station and Staging Area											
Census Tract 9661.01, Block Group 2	1,579	92.1	0.0	0.6	0.0	0.0	0.0	4.2	3.0	7.8	12.8
<p>Source: American Community Survey, 2022, File # B17017 and File # B03002.</p> <p>a "Minority" refers to people who reported their ethnicity and race as something other than non-Hispanic White.</p> <p>b Low-income or minority populations exceeding the established thresholds are indicated in red, bold, type and blue shading.</p> <p>Due to rounding differences in the dataset, the totals may not reflect the sum of the addends.</p>											

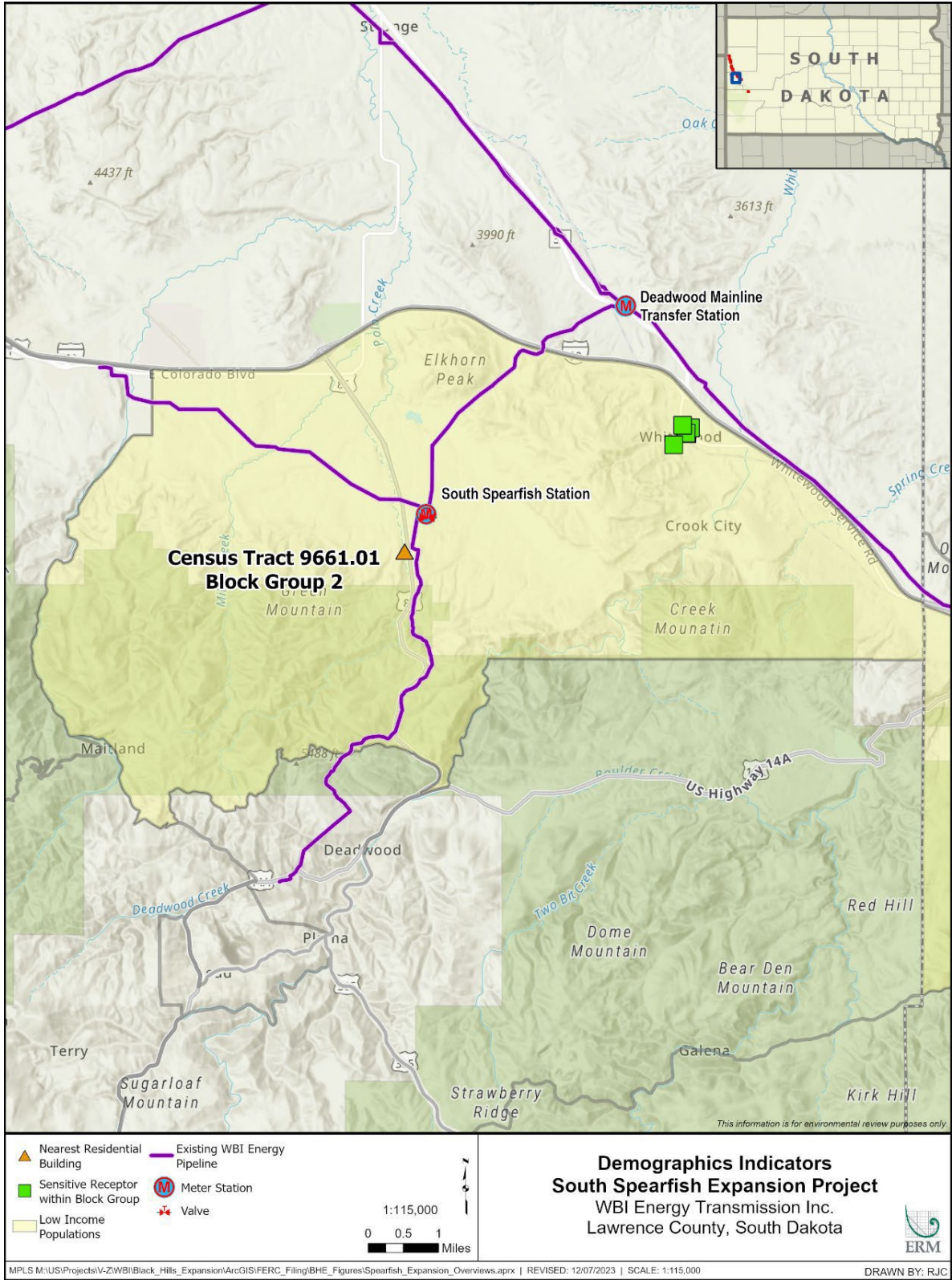


Figure 1 Environmental Justice Communities within 1 mile of the Proposed Project

7.3 IMPACTS ON ENVIRONMENTAL JUSTICE COMMUNITIES

Promising Practices provides methodologies for evaluating environmental justice impacts related to human health or environmental hazards; natural and physical environment; and associated social, economic, and cultural factors. Consistent with *Promising Practices*, Executive Order 12898, and Executive Order 14096, we reviewed the Project to determine if its resulting impacts would be disproportionate and adverse on minority and low-income populations and also whether impacts would be significant.²⁸ *Promising Practices* provides that agencies can consider any of a number of conditions in this determination and the presence of any of these factors could indicate a potential disproportionate and adverse impact. For this Project, a disproportionate and adverse effect on an environmental justice community means the adverse effect is predominantly borne by such population. Relevant considerations include the location of Project facilities and the Project's human health and environmental impacts on identified environmental justice communities, including direct, indirect and cumulative impacts.

Project work within identified environmental justice communities includes construction of the proposed South Spearfish Station (containing the relocated South Spearfish Town Border Station and the new Deadwood Lateral Transfer Station) within Census Tract 9661.01, Block Group 2 which is defined as a low-income population.

Impacts on the natural and human environment from construction and operation of Project facilities are identified and discussed throughout this document. Factors that could affect environmental justice communities include visual impacts (see section B.5.3), socioeconomic impacts (see section B.7.3), traffic impacts (see section B.7.3), and air quality and noise impacts from construction and operation (see sections B.8 and B.9). Potentially adverse environmental effects on surrounding communities associated with the Project, including environmental justice communities, would be minimized and/or mitigated. In general, the magnitude and intensity of the aforementioned impacts would be greater for individuals and residences closest to the Project's facilities and would diminish with distance. These impacts are addressed in greater detail in the associated sections of this EA. Environmental justice concerns are not present for other resource areas such as geology, groundwater, surface water, wetlands, wildlife, or cultural resources due to the minimal overall impact the Project would have on these resources.

Visual Impacts

The proposed South Spearfish Station and the staging area is in an environmental justice community. The nearest structure is the Frawley Ranch National Historic Landmark which is approximately 1,870 feet west-northwest to the proposed station and the staging area. The visual characteristic of the area is relatively flat and open land. Construction related impacts would be

²⁸ See *Promising Practices* at 33 (stating that “an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA” and in other circumstances “an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA”); see also *Promising Practices* at 45-46 (explaining that there are various approaches to determining whether an impact will cause a disproportionately high and adverse impact). We recognize that CEQ and EPA are in the process of updating their guidance regarding environmental justice and we will review and incorporate that anticipated guidance in our future analysis, as appropriate.

visible. Construction is estimated to last about five months; therefore, construction-related visual impacts on the environmental justice communities would be temporary and less than significant. WBI Energy would utilize “hickory” or “desert sand” non-reflective paint on buildings and install a chain link fence with beige-colored privacy slats to further conceal the Project infrastructure. Given the distance to the nearest receptors and the visual mitigation plan, we conclude the proposed South Spearfish Station would not have adverse visual impacts on the environmental justice communities during operation.

Socioeconomics

WBI Energy anticipates that it would need to hire up to 35 nonlocal workers during peak construction. Increased spending on lodging, food, and services would (negligibly) boost local economic activity in the environmental justice communities within the geographic scope of the Project. The 35 nonlocal workers would need to find accommodations while they are temporarily residing in the area. The overall housing supply in the county would accommodate the anticipated 35 nonlocal workers. These workers would likely reside at locations near the Project area resulting in a minor (negligible) increase in the demand for emergency medical and police services associated with increased traffic and worksite related accidents. Therefore, we conclude that construction-related socioeconomic impacts on environmental justice communities would be less than significant. No new operations personnel would be required; therefore, no socioeconomic impacts on environmental justice communities from operations are anticipated.

Traffic

Throughout the construction phase of the Project, WBI Energy would utilize existing public roads to access the Project. The proposed South Spearfish Station is in environmental justice community Census Tract 9661.01, Block Group 2 and the Project would generate 10 estimated round trips per day during peak construction at each location. The round trips during construction for the Project facilities and commuting construction workers would generate temporary increased traffic volume in the environmental justice communities during construction. However, given the limited number of trips, we conclude that traffic impacts within the environmental justice communities would be less than significant. Furthermore, no effects on traffic would occur during operations because no new operations personnel would be required.

Air Quality

Emissions from construction equipment would depend on the duration, number, and type of vehicles/equipment. Potential emissions include combustion-related air pollutants (oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO₂), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}), and hazardous air pollutants (HAP) as well as fugitive dust. Emissions from construction equipment would be temporary and localized at each of the Project work areas consistent with WBI Energy’s *Fugitive Dust Control Plan*. Some temporary indirect emissions, attributable to construction workers commuting to and from work sites during construction and from on-road and off-road construction vehicle traffic, could also occur.

Given that construction emissions would be minor, we find that the Project would not cause or significantly contribute to a violation of any applicable ambient air quality standard, or significantly affect local or regional air quality in the environmental justice communities affected by the proposed South Spearfish Station. Further discussion on air quality can be found in section B.8 of this EA.

Operation of the Project would result in minor fugitive emissions associated with meter and regulating facilities. We therefore conclude that there would be less than significant impacts on air quality in the environmental justice communities from operation of the facility.

Noise

Noise would be generated during construction of the aboveground facilities for the Project. Noise levels would be highest in the immediate vicinity of construction activities and would diminish with distance from each work area. These impacts would be localized and temporary. Sound level changes would depend on the type of equipment used, the duration of use for each piece of equipment, the number of construction vehicles and machines used simultaneously, and the distance between the sound source and receptor.

The proposed South Spearfish Station and the staging is in an environmental justice community. The nearest residence is approximately 1,870 feet west-northwest to the proposed station and the staging area. Based on the short duration of construction activities (about 5 months) and that construction of the Project would be intermittent and primarily limited to daytime hours, we conclude that construction noise would result in a less than significant impact on the environmental justice community affected by the proposed South Spearfish Station. There would be no increase of noise from operation of the station.

7.4 ENVIRONMENTAL JUSTICE IMPACT MITIGATION

As described in *Promising Practices*, when an agency identifies potential adverse impacts it may wish to evaluate practicable mitigating measures. WBI Energy has committed to several minimization and mitigation measures to reduce impacts related to construction-period dust and noise, as well as long-term noise. Although not specifically targeted at mitigating impacts on environmental justice communities, mitigation measures would be implemented across the Project area, including within the identified environmental justice communities. WBI Energy has committed to:

- limit construction activities to 7:00 a.m. to 7:00 p.m. with the exception of the following activities:
 - hydrostatic testing operations
 - critical tie-ins
- complying with the Fugitive Dust Control Plan.

7.5 DETERMINATION OF DISPROPORTIONATE AND ADVERSE IMPACTS ON ENVIRONMENTAL JUSTICE COMMUNITIES

As described throughout this EA, the proposed Project would have a range of impacts on the environment and on individuals living in the vicinity of the Project facilities, including

environmental justice populations. As highlighted in table 5, the Project facilities are within an environmental justice community. As previously stated, Project work within the identified environmental justice communities includes construction and operation of South Spearfish Station (containing the relocated South Spearfish Town Border Station and the new Deadwood Lateral Transfer Station). Impacts associated with the construction and operation of these facilities on environmental justice communities would be disproportionate and adverse as they would be predominately borne by environmental justice communities. Construction and operational impacts on environmental justice communities, including those associated with visual resources, socioeconomics, traffic, air quality, and noise for all Project facilities, would be less than significant and mostly temporary.

8.0 AIR QUALITY

This section summarizes federal and state air quality regulations that are applicable to the proposed facilities. The term air quality refers to relative concentrations of pollutants in the ambient air. Air quality would be affected by construction of the Project. During construction, short-term emissions would be generated from the usage of equipment, land disturbance, and increased traffic from worker and delivery vehicles for all locations. Once completed, the Project would transition to operational phase emissions which would only include small amounts of fugitive emissions of natural gas. Because a bulk of the proposed Project involves the relocation of facilities in which fugitive emissions would remain approximately the same and because the amount of additional fugitive emissions associated with new facilities would be very small, we conclude that there would be no operational impacts on air quality associated with the proposed Project.

8.1 Existing Air Quality

Ambient air quality is protected by federal and state regulations. Under the Clean Air Act (CAA) and its amendments, the USEPA has established the National Ambient Air Quality Standards (NAAQS)²⁹ for criteria pollutants, including CO, lead, nitrogen dioxide, ozone, particulate matter (PM₁₀ and PM_{2.5}), and SO₂. The South Dakota Department of Agriculture and Natural Resources has the authority to implement permit programs under the CAA for the proposed Project facilities. These standards incorporate short-term (hourly or daily) levels and long-term (annual) levels to address acute and chronic exposures to the pollutants, as appropriate. The NAAQS include primary standards, which are designed to protect human health, including the health of sensitive subpopulations such as children and those with chronic respiratory problems. The NAAQS also include secondary standards designed to protect public welfare, including economic interests, visibility, vegetation, animal species, and other concerns not related to human health.

VOCs are also regulated by the USEPA to prevent the formation of ozone, a constituent of photochemical smog. Many VOCs form ground level ozone by reacting with sources of oxygen molecules, such as NO_x, in the atmosphere in the presence of sunlight. NO_x and VOCs

²⁹ The current NAAQS are listed on USEPA's website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

are referred to as ozone precursors. HAPs are also emitted during fossil fuel combustion. HAPs are chemicals known to cause human health, such as cancer, and environmental impacts.

GHGs produced by fossil-fuel combustion are carbon dioxide (CO₂) and nitrous oxide (N₂O). GHGs status as a pollutant is not related to toxicity; GHGs are non-toxic and non-hazardous at normal ambient concentrations, and there are no applicable ambient standards or emission limits for GHGs under the CAA. During construction activities, GHGs would be emitted from construction equipment. During operation, fugitive emissions from pipeline components such as valves and flanges would result in small emissions of methane. Emissions of GHGs are typically expressed in terms of CO₂ equivalents (CO₂e).³⁰ The CO₂e unit of measure takes into account the global warming potential (GWP) of each GHG over a specified timeframe. The GWP is a ratio relative to CO₂ that is based on the particular GHG's ability to absorb solar radiation as well its residence time in the atmosphere.³¹ Thus, CO₂ has a GWP of 1, CH₄ has a GWP of 25, and N₂O has a GWP of 298 on a 100-year timescale.

Air quality control regions (AQCRs) are areas established by the USEPA and local agencies for air quality planning purposes, in which State Implementation Plans describe how the NAAQS would be achieved and maintained. The AQCRs are intra- and interstate regions such as large metropolitan areas where improvement of the air quality in one portion of the AQCR requires emission reductions throughout the AQCR. Each AQCR, or smaller portion within an AQCR (such as a county), is designated, based on compliance with the NAAQS, as attainment, unclassifiable, maintenance, or nonattainment, on a pollutant by-pollutant basis. Areas in compliance or below the NAAQS are designated as attainment, while areas not in compliance or above the NAAQS are designated as nonattainment. The Project is only proposed within attainment areas, meeting the NAAQS for all six criteria air pollutants (USEPA 2022c).

8.2 Permitting Regulatory Requirements

The CAA is the basic federal statute governing air pollution in the United States. The provisions of the CAA that are potentially relevant to the Project are:

- New Source Review (state and federal);
- Federal Class I Area Protection;
- State and Title V Operating Permit Programs;
- New Source Performance Standards;
- National Emission Standards for Hazardous Air Pollutants;
- General Conformity; and
- Mandatory Greenhouse Gas Reporting.

The Project does not include the addition of stationary sources or modification of air pollutants subject to state review. No changes in existing air emissions are anticipated for this

³⁰ Other GHG gases are converted to CO₂e by means of the GWP of each gas.

³¹ To obtain the CO₂e quantity, the mass of the particular compound is multiplied by the corresponding GWP, the product of which is the CO₂e for that compound. The CO₂e value for each of the GHG compounds is summed to obtain the total CO₂e GHG emissions.

Project; therefore, the only potentially relevant provisions are General Conformity and mandatory GHG reporting.

General conformity regulations in 40 CFR 93, subpart B, are intended to ensure that actions from a federal agency that occur in nonattainment and maintenance areas do not interfere with a state's ability to comply with the NAAQS (USEPA 2022e). The Project is in areas that are in attainment with the NAAQS; therefore, a general conformity determination is not required for the proposed Project.

The mandatory GHG reporting rule (40 CFR 98) establishes reporting thresholds and requirements for emission sources of CO₂, CH₄, nitrous oxide, and each fluorinated GHG. The CO₂e is the aggregate of these emissions, considering the global warming potential for each pollutant. The GHG reporting rule establishes a reporting threshold of 25,000 actual metric tons per year of CO₂e emissions (USEPA 2022f).

Per the 2015 Revisions to 40 CFR 98, Subpart W, transmission pipeline facilities were added as facilities required to report GHGs from pipeline blowdowns (USEPA 2015). A transmission pipeline facility is the total United States mileage of natural gas transmission pipelines as defined in 40 CFR 98.238. WBI Energy currently monitors GHG emissions from its transmission pipeline affected facility and reports emissions as required. WBI Energy would continue to monitor GHG emissions from pipeline blowdowns and comply with the GHG reporting requirements, as necessary.

8.3 Construction Emissions

The Project would result in air quality impacts associated with construction, including emissions from fossil-fueled construction equipment and fugitive dust. The emissions would be temporary in nature and would be localized at each of the Project work areas, which would not significantly affect regional air quality. Emissions from construction equipment would depend on the duration, number, and type of vehicles/equipment. Potential emissions include combustion-related air pollutants (NO_x, CO, VOC, SO₂, PM₁₀, PM_{2.5}, CO₂e, and HAPs) as well as fugitive dust. Some temporary indirect emissions, attributable to construction workers commuting to and from work sites during construction and from on-road and off-road construction vehicle traffic, could also occur.

WBI Energy would conduct construction activities in accordance with its *Fugitive Dust Control Plan*. Dust suppression measures would be employed as necessary to control fugitive dust emissions and maintain compliance with applicable regulations. Water trucks would be readily available to spray disturbed areas, stockpiles, or dirt/gravel roads with water. Only approved access roads would be used and speed limits on paved and unpaved roads would be enforced. WBI Energy would comply with the applicable USEPA mobile source emissions performance standards by using well-maintained vehicles, and equipment would be shut down when not in use to minimize idling emissions. Construction emissions for the Project are presented in table 6.

Construction Activity	CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	GHG CO ₂ e ^a	VOC	HAP
Off-Road Construction Equipment	0.1	<0.1	<0.1	<0.1	<0.1	100	<0.1	<0.1
On-Road Motor Vehicles	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1
Construction Activity Fugitive Dust	--	--	2.1	0.3	--	--	--	--
Unpaved Vehicle Travel	--	--	5.0	0.5	--	--	--	--
Blowdowns	--	--	--	--	--	600	0.2	<0.1
Total Construction Emissions	0.2	<0.1	7.1	0.8	<0.1	700.4	0.3	<0.1

tpy = tons per year;
^a CO₂e is the sum of CO₂, CH₄, and nitrous oxide emissions multiplied by the applicable GWP.

Given the temporary and intermittent nature of construction emissions, and adherence to applicable thresholds, we find that construction of the Project would not cause or significantly contribute to a violation of any applicable ambient air quality standard, or significantly affect local or regional air quality.

8.4 Operational Emissions

Operation of the Project would result in minor operational emissions associated with fugitive emissions of methane from meter and regulating facilities. Because the project involves relocations and only minor equipment additions such as pig launchers, the amount of additional fugitive emissions would be minor. We therefore conclude that there would be no significant impacts on air quality from operation of the facility.

9.0 NOISE

Construction and operation of the Project would affect the local noise environment in the Project area. The ambient sound level of a region, which is defined by the total noise generated within the specific environment, is usually composed of sounds emanating from both natural and artificial sources. At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, in part due to changing weather conditions and the impacts of seasonal vegetative cover.

In 1974, the USEPA published its Information on *Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Two measurements used to relate the time-varying quality of environmental noise to its known effects on people are the 24-hour equivalent sound level (L_{eq}) and the day-night sound level (L_{dn}). The L_{eq} is an A-weighted sound level containing the same sound energy as the instantaneous sound levels measured over a specific time period. Noise levels are perceived differently depending on length of exposure and time of day. The L_{dn} takes into account the duration and time the noise is encountered. Specifically, in the calculation of the L_{dn}, late night to early morning (10:00 p.m. to 7:00 a.m.) noise exposures are penalized +10 decibels (dB) to account for people’s greater

sensitivity to sound during the nighttime hours. The USEPA has indicated that an L_{dn} of 55 dBA protects the public from indoor and outdoor activity interference. We have adopted this criterion for operational noise and use it to evaluate the potential noise impacts from the proposed Project on any noise sensitive areas (NSAs), such as residences, schools, or hospitals. We also use it to evaluate noise impacts from nighttime construction activities (e.g., horizontal directional drill) or operation of the Project as those impacts are more permanent than the temporary noise impacts associated with daytime construction. Also, in general, a person's threshold for a perceivable change in loudness on the A-weighted sound level is about 3 dBA, whereas a 5 dBA change is clearly noticeable, and a 10 dBA change is perceived as either twice or half as loud.

Due to the 10 dBA nighttime penalty added prior to calculation of the L_{dn} , for a facility to meet the 55 dBA L_{dn} limit established by the USEPA to protect the public from indoor and outdoor activity interference, a facility must be designed such that the constant 24-hour noise level does not exceed an L_{eq} of 48.6 dBA at NSA. The A-weighted scale is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. For an essentially steady sound source that operates continuously over a 24-hour period and controls the environmental sound level, the L_{dn} is approximately 6.4 decibels above the measured L_{eq} .

There are no applicable county or local noise regulations associated with the Project.

9.1 Construction Noise

Noise would be generated during construction of the aboveground facility modifications for the Project. Noise levels would be highest in the immediate vicinity of construction activities and would diminish with distance from each work area. These impacts would be localized and temporary. Sound level changes would depend on the type of equipment used, the duration of use for each piece of equipment, the number of construction vehicles and machines used simultaneously, and the distance between the sound source and receptor. Construction activities associated with the Project would be performed with standard heavy equipment such as track-excavators, backhoes, cranes, bulldozers, and dump trucks. Noise would also be generated by trucks and other light vehicles traveling in and near areas under construction. Construction equipment and worker vehicles generally operate intermittently and may change depending on Project activity or phase.

One NSA was identified within 0.5 mile of the South Spearfish Station. This NSA (NSA 1—the Frawley Ranch National Historic Landmark) is approximately 1,870 feet west-northwest of the proposed station.

Two pipeline blowdowns would be conducted at the Deadwood Mainline Transfer Station during installation of pig launchers. Noise generated during these blowdown events would be temporary and of short duration, lasting between approximately 38 minutes and 67 minutes each. WBI Energy would utilize a blowdown trailer with a silencer that to reduce blowdown noise levels. Table 7 below shows the noise impacts from the blowdowns on the nearest NSAs. Due to the temporary nature of the two blowdowns, we do not expect any significant impact from them.

NSA	Distance / Direction to NSA from Blowdown Point	Calculated Blowdown Noise Level with Trailer Silencer
1—Pittman Lane	130 feet / North	92 dBA
2—Heartland Expressway	1,000 feet / Southeast	71 dBA
3—Pittman Lane (North)	1,400 feet / North-Northeast	66 dBA
4—Pittman Lane (Northeast)	1,900 feet / Northeast	62 dBA

Because Project construction activities are temporary and the distance to the nearest NSA is 0.35 miles away (with the exception of the two short blowdown events at the Deadwood Mainline Transfer Station), we do not expect significant impact on noise levels from construction.

9.2 Operation

The Project would result in operational noise impacts from the proposed South Spearfish Station which would consist of four regulator skids housed within a building. WBI Energy performed an acoustical analysis using estimated maximum noise levels of 83 dBA at 1 meter for each skid as provided by a potential vendor. Noise level calculations for NSA 1 included spreading losses and atmospheric effects as stipulated by the International Standard for Organization (1996) 9613-1 method. Minimal credit was taken for the attenuation that the building would provide. Table 8 provides a summary of the meter station analysis. As shown in the table, there would be no increase of noise from operation of the station. We therefore conclude there would be no significant impact from operational noise.

NSA	Distance (feet) / Direction to NSA	Existing Ambient L _{dn} with no Station ^a	Calculated L _{dn} for Station	Combined L _{dn} (Meter Station plus Existing Ambient)	Expected Increase
1—Frawley Ranch National Historic Landmark	1,870 / West-Northwest	52	28	52	0

^a Estimated based on land use and ANSI (1993)

10.0 RELIABILITY AND SAFETY

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of natural gas. The greatest hazard is a fire or explosion following a major pipeline rupture. The primary component of natural gas, CH₄, is colorless, odorless, and tasteless. It is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death. CH₄ has an auto-ignition temperature of 1,000°F and is flammable at concentrations between 5.0 and 15.0 percent in air. An unconfined mixture of CH₄ and air is not explosive; however, it may ignite and burn if there is an ignition source. A flammable

concentration within an enclosed space in the presence of an ignition source can explode. It is buoyant at atmospheric temperatures and disperses rapidly in air.

Under a Memorandum of Understanding on Natural Gas Transportation Facilities dated January 15, 1993, between the U.S. Department of Transportation (USDOT) and FERC, the USDOT has the exclusive authority to promulgate federal safety standards used in the transportation of natural gas. Section 157.14(a)(9)(vi) of the FERC's regulations require that an applicant certify that it would design, install, inspect, test, construct, operate, replace, and maintain the facility for which a Certificate is requested in accordance with federal safety standards and plans for maintenance and inspection. Alternatively, an applicant must certify that it has been granted a waiver of the requirements of the safety standards set by the USDOT in accordance with section 3(e) of the Natural Gas Pipeline Safety Act. FERC accepts this certification and does not impose additional safety standards. If the Commission becomes aware of an existing or potential safety problem, there is a provision in the memorandum to promptly alert the USDOT. The memorandum also provides for referring complaints and inquiries made by state and local governments and the general public involving safety matters related to pipelines under the Commission's jurisdiction.

Safety Standards

The USDOT is mandated to prescribe minimum safety standards to protect against risks posed by natural gas facilities under Title 49 U.S.C. Chapter 601. The USDOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) administers the national regulatory program to ensure the safe transportation of natural gas and other hazardous materials by pipeline. It develops safety regulations and other approaches to risk management that ensure safety in the design, construction, testing, operation, maintenance, and emergency response of natural gas facilities. Many of the regulations are written as performance standards, which set the level of safety to be attained and allow the operator to use various technologies to achieve safety. PHMSA's safety mission is to ensure that people and the environment are protected from the risk of incidents. This work is shared with state agency partners and others at the federal, state, and local level.

Emergencies

The USDOT prescribes the minimum standards for operating and maintaining pipeline and aboveground natural gas facilities, including the requirement to establish a written plan governing these activities.³² Each operator is required to establish an emergency plan that includes procedures to minimize the hazards of a natural gas emergency. Key elements of the plan include procedures for:

- receiving, identifying, and classifying emergency events, gas leakage, fires, explosions, and natural disasters;
- establishing and maintaining communications with local fire, police, and public officials, and coordinating emergency response;

³² Title 49, U.S.C. Chapter 601

- emergency system shutdown and safe restoration of service;
- making personnel, equipment, tools, and materials available at the scene of an emergency; and
- protecting people first and then property and making them safe from actual or potential hazards.

The USDOT requires that each operator establish and maintain liaison with appropriate fire, police, and public officials to learn the resources and responsibilities of each organization that may respond to a natural gas pipeline or facility emergency, and to coordinate mutual assistance.

Pipeline Accident Data

The USDOT requires all operators of natural gas transmission pipelines to notify the USDOT of any significant incident and to submit a report within 20 days of the incident. Significant incidents are defined as any leaks that caused a death or personal injury requiring hospitalization or involve property damage of more than \$50,000 (1984 dollars).³³ During the period from 2000 through 2019, a total of 1,112 significant incidents were reported on approximately 296,000 total miles of onshore natural gas transmission pipelines nationwide (PHMSA 2020a).

The use of both an external protective coating and a cathodic protection system,³⁴ required on all pipelines installed after July 1971, significantly reduces the corrosion rate compared to unprotected or partially protected pipe. Outside force, excavation, and natural forces were the cause in 32.1 percent of significant pipeline incidents from 2000 to 2019. These result from the encroachment of mechanical equipment such as bulldozers and backhoes; earth movements due to soil settlement, washouts, or geological hazards; weather effects such as winds, storms, and thermal strains; and willful damage.

Since 1982, operators have been required to participate in One-Call public utility programs in populated areas to minimize unauthorized excavation activities in the vicinity of pipelines. The One-Call program is a service used by public utilities and some private sector companies (e.g., oil pipelines and cable television) to provide preconstruction information to contractors or other maintenance workers on the underground location of pipes, cables, and culverts.

With WBI Energy's continued compliance with USDOT safety standards, ongoing operation, and maintenance requirements, we conclude the Project would be completed safely.³⁵

³³ \$50,000 in 1984 dollars is approximately \$126,927 as of February 2020 (Bureau of Labor Statistics, 2020).

³⁴ Cathodic protection is a technique to reduce corrosion (rust) of the natural gas pipeline through the use of an induced current or a sacrificial anode (like zinc) that corrodes at faster rate to reduce corrosion.

³⁵ PHMSA inspectors perform inspections on interstate natural gas pipeline facilities. The USDOT pipeline standards are published in CFR Parts 190-199 of Title 49.

11.0 CUMULATIVE EFFECTS

In accordance with NEPA, we considered the cumulative effects of the Project and other projects or actions in the area. Cumulative effects represent the incremental effects of the proposed action when added to other past, present, or reasonably foreseeable future actions.

The cumulative effect analysis generally follows the methodology set forth in relevant guidance from the CEQ and the USEPA and focuses on potential impacts from a proposed project on resource areas or issues where incremental contributions would be potentially significant when added to potential impacts of other actions if they take place in the same general area over a given period of time. To avoid unnecessary discussions of insignificant impacts and to adequately address and accomplish the purpose of this analysis, an action must meet the following criteria to be included in the cumulative effects analysis:

- impact a resource area potentially affected by the project;
- cause this impact within all, or part, of the project’s geographic scope; and
- cause this impact within all, or part, of the time span for the potential impact of the project.

This EA analyzes the Project impacts on geologic resources, soils, groundwater, vegetation, wildlife, cultural resources, land use, environmental justice, noise, and air quality; and these resources are assessed below for potential cumulative effects within defined geographic scopes (see Table 6). As noted in the introduction to section B, the Project would not affect wetlands or surface waterbodies; and therefore, these resources are not addressed further.

Environmental Resource	Area of Impact
Soils and Geology	Construction workspaces
Groundwater, Vegetation, Wildlife	Hydrologic Unit Code (HUC) 12 Watershed
Cultural Resources	Overlapping impacts within the APE
Land Use	1 mile radius
Visual	For aboveground facilities, distance that the tallest feature at the planned facility would be visible from neighboring communities. For pipelines, use 0.25 mile and existing visual access points (e.g., road crossings)
Noise - Operations	Other facilities that would impact any noise sensitive area (NSA) located within 1 mile of a noise emitting permanent aboveground facility
Noise - Construction	0.25 mile from pipeline or aboveground facilities.
Air Quality - Operations	1 mile radius from meter stations
Air Quality – Construction	0.25 mile from pipeline or aboveground facilities
Environmental Justice	Affected environmental justice block groups

As part of our analysis, we identified these three projects in the vicinity of the proposed project:

- Line Section 15 Expansion Project (CP23-87-000)
- U.S. Department of Energy (DOE) Deep Underground Neutrino Experiment (DUNE) Project
- Coeur Wharf Boston Expansion

All of these projects are located 6 or more miles from the proposed project and are outside any of the geographic scopes in table 9. We therefore find that there would be no overlap of effects and no cumulative impacts.

11.1 Climate Change

Climate change is the variation in the Earth's climate (including temperature, precipitation, humidity, wind, and other meteorological variables) over time. Climate change is driven by accumulation of GHG in the atmosphere due to the increased consumption of fossil fuels (e.g., coal, petroleum, and natural gas) since the early beginnings of the industrial age and accelerating in the mid- to late-20th century.³⁶ The GHG produced by fossil-fuel combustion are CO₂, CH₄, and N₂O.

In 2017 and 2018, the U.S. Global Change Research Program (USGCRP) issued its Climate Science Special Report: Fourth National Climate Assessment, Volumes I and II.³⁷ This report and the more recently released report by the Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis, states that climate change has resulted in a wide range of impacts across every region of the country and the globe.³⁸ Those impacts extend beyond atmospheric climate change alone and include changes to water resources, agriculture, ecosystems, human health, and ocean systems.³⁹ According to the Fourth Assessment Report, the United States and the world are warming; global sea level is rising and oceans are acidifying;

³⁶ Intergovernmental Panel on Climate Change, United Nations, Summary for Policymakers of Climate Change 2021: The Physical Science Basis (Valerie Masson-Delmotte et al., eds.) (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (IPCC Report) at SPM-5. Other forces contribute to climate change, such as agriculture, forest clearing, and other anthropogenically driven sources.

³⁷ U.S. Global Change Research Program. *Climate Science Special Report: Fourth National Climate Assessment, Volume I, Chapter 3 Detection and Attribution of Climate Change* (2017), available at: https://science2017.globalchange.gov/downloads/CSSR2017_FullReport.pdf (accessed June 3, 2021).

³⁸ IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.

³⁹ 6 IPCC Report at SPM-5 to SPM-10.

and certain weather events are becoming more frequent and more severe.⁴⁰ These impacts have accelerated throughout the end of the 20th and into the 21st century.⁴¹

GHG emissions do not result in proportional local and immediate impacts; it is the combined concentration in the atmosphere that affects the global climate. These are fundamentally global impacts that feed back to local and regional climate change impacts. Thus, the geographic scope for cumulative analysis of GHG emissions is global rather than local or regional. For example, a project 1 mile away emitting 1 ton of GHG would contribute to climate change in a similar manner as a project 2,000 miles distant also emitting 1 ton of GHG.

Climate change is a global phenomenon; however, for this discussion, we will focus on the existing and potential climate change impacts in the general Project area. The USGCRP's Fourth Assessment Report notes the following observations of environmental impacts attributed to climate change in the Northern Great Plains region of the United States (USGCRP, 2017 and 2018):

- since the beginning of the 20th century, temperatures in the Project area have risen approximately 2.6 °F;
- increasing rainfall, with an increase in the frequency of 2-inch rainfall events;
- heavy rainfall events are leading to more flooding, erosion, and runoff into waterways;
- climate-driven changes in snowpack, spring snowmelt, and runoff have resulted in more rapid melting of winter snowpack and earlier peak runoff due to rapid springtime warming; and
- lower stream flows, especially in late summer, which combined with warmer air temperatures, have caused stream temperatures to rise.

The USGCRP's Fourth Assessment Report notes the following projections of climate change impacts in the Southcentral Region with a high or very high level of confidence:⁴²

- annual average temperatures in the Northern Great Plains are projected to increase by 3.6 to 4.6 °F by the mid-21st century and by 5.4 to 9.4 °F by the late 21st century, compared to the average for 1976-2005;
- summer precipitation is expected to vary across the Northern Great Plains, ranging from no change under a lower scenario to between 10 and 20 percent reductions under a higher scenario; however, this is projected to occur with a higher frequency of heavy rain;

⁴⁰ USGCRP Report Volume II at 73-75.

⁴¹ See, e.g., USGCRP Report Volume II at 99 (describing accelerating flooding rates in Atlantic and Gulf Coast cities).

⁴² USGCRP Report Volume II.

- the warmer and generally wetter conditions projected for some of the Northern Great Plains, coupled with elevated atmospheric CO₂ concentrations, are expected to challenge existing agricultural practices with changing soil moisture content, growing season length, increase crop pests, increase weed and invasive competition as well as other identified challenges;
- the probability for more very hot days (days with maximum temperatures above 90°F) is expected to increase, and cool days (days with minimum temperatures less than 28°F) are expected to decrease by 30 days or more per year by mid-century; and
- in the mountains of western Wyoming and western Montana, the fraction of total water in precipitation that falls as snow (from October 1 to March 31) is expected to decline by between 25 and 40 percent by 2100.

It should be noted that while the impacts described above taken individually may be manageable for certain communities, the impacts of compound events (such as simultaneous heat and drought, wildfires associated with hot and dry conditions, or flooding associated with high precipitation on top of saturated soils) can be greater than the sum of the parts.⁴³

The GHG emissions associated with construction of the Project were identified and quantified in section B.8.3 of the EA. Emissions of GHG are typically expressed in terms of CO_{2e}.⁴⁴ Construction CO_{2e} emissions from the Project are estimated to be 700.4 tons (635 metric tons). As discussed in section B.8.3, we did not quantify any new operational CO_{2e} emissions given that the facility relocations and minor equipment additions would result in only minor fugitive emissions that would remain largely equivalent to that of the baseline conditions for the existing facilities. Because there is no new capacity proposed for the project, there are no downstream emissions associated with end-use.

Construction of the Project would increase the atmospheric concentration of GHG in combination with past, current, and future emissions from all other sources globally, and would contribute incrementally to future climate change impacts. To assess impacts on climate change associated with the Project, Commission staff considered whether it could identify discrete physical impacts resulting from the Project's GHG emissions or compare the Project's GHG emissions to established targets designed to combat climate change.

To date, Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource impacts, Commission staff are unable to assess the Project's contribution to climate change through any objective analysis of physical impact attributable to the Project. Additionally, Commission staff have not been able to find an established threshold for determining the Project's significance when

⁴³ USGCRP Report Volume II.

⁴⁴ GHG gases are converted to CO_{2e} by means of the GWP; the measure of a particular GHG's ability to absorb solar radiation; and its residence time within the atmosphere, consistent with the USEPA's established method for reporting GHG emissions for air permitting requirements that allows a consistent comparison with federal regulatory requirements.

compared to established GHG reduction targets at the state or federal level. Ultimately, this EA is not characterizing the Project's GHG emissions as significant or insignificant.⁴⁵ However, as we have done in prior NEPA analyses, we disclose the Project's GHG emissions in comparison to national and state GHG emission inventories.

In order to provide context of the Project GHG emissions on a national level, we compare the Project GHG emissions to the total current GHG emissions inventory for the United States as a whole. At a national level, 5,586 million metric tons of CO₂e were emitted in 2021 (inclusive of CO₂e sources and sinks) (USEPA, 2023g). Construction emissions from the Project could potentially increase CO₂e emissions based on the national 2021 levels by 0.00001 percent.

To provide context on a state level, we compare the Project's estimated GHG emissions to the state emission inventories. The Project's construction emissions occur in South Dakota, and we assume all downstream end use would also be in South Dakota based on the Project shipper and delivery points.⁴⁶ At a state level, 40.2 million metric tons of CO₂ were emitted in 2021 in South Dakota in 2021 (inclusive of CO₂ sources and sinks).⁴⁷ Project construction could potentially increase CO₂ emissions based on statewide 2021 levels by 0.002 percent.

Below, we include a disclosure of the social cost of GHG (SC-GHG), also referred to as the social cost of carbon (SCC). Calculating the SC-GHGs does not enable the Commission to determine whether the reasonably foreseeable GHG emissions associated with the Project are significant or not significant in terms of their impact on global climate change.⁴⁸ In addition, there are no criteria to identify what monetized values are significant for NEPA purposes, and we are currently unable to identify any such appropriate criteria.⁴⁹

⁴⁵ See e.g., *Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 63 (2023) (“...there currently are no accepted tools or methods for the Commission to use to determine significance, therefore the Commission is not herein characterizing these emissions as significant or insignificant.”).

⁴⁶ See WBI Energy's application at pg 3. “Montana-Dakota entered into a binding Precedent Agreement for firm transportation service of 15,000 equivalent dekatherms per day for 10 years to serve four primary delivery locations in western South Dakota, including Spearfish, South Dakota.”

⁴⁷ <https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals>. Accessed January 2023.

⁴⁸ See *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 at P296, (2017), *aff'd sub nom.*, *Appalachian Voices v. FERC*, 2019 WL 847199 (D.C. Cir. 2019); *Del. Riverkeeper v. FERC*, 45 F.th 104, 111 (D.C. Cir. 2022); and *Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 61 (2023). The Social Cost of GHGs tool merely converts GHG emissions estimates into a range of dollar-denominated figures; it does not, in itself, provide a mechanism or standard for judging “significance.”

⁴⁹ *Tenn. Gas Pipeline Co., L.L.C.*, 181 FERC ¶ 61,051 at P 37; see also *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 at P 296, *order on reh'g*, 163 FERC ¶ 61,197, at PP 275-297 (2018), *aff'd*, *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at 2 (D.C. Cir. Feb. 19, 2019) (unpublished) (“[The Commission] gave several reasons why it believed petitioners' preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.”); *EarthReports*, 828 F.3d 949, 956 (D.C. Cir. 2016) (accepting the Commission's explanation why the social cost of carbon tool would not be appropriate or informative for project-specific review, including because “there are no established criteria identifying the monetized values that are to be considered significant for NEPA purposes”); *Tenn. Gas Pipeline Co., L.L.C.*, 180 FERC ¶ 61,205, at P 75 (2022);

As both the USEPA and CEQ participate in the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG), Commission staff used the methods and values contained in the IWG’s current draft guidance but note that different values would result from the use of other methods.⁵⁰ Accordingly, Commission staff calculated the SC-GHG for CO₂, CH₄, and N₂O. For the calculation, staff assumed discount rates of 5 percent, 3 percent, and 2.5 percent.⁵¹ Noting these assumptions, the emissions from increased GHGs disclosed are calculated to result in a total SC-GHG equal to \$19,074, \$43,011, and \$56,809, respectively (all in 2020 dollars).⁵² Using the 95th percentile of the SCC using the 3 percent discount rate,⁵³ the total SCC from the Project is calculated to be \$115,422 (in 2020 dollars).

C. ALTERNATIVES

In accordance with NEPA and Commission policy, we identified and evaluated alternatives to the specific natural gas transmission facilities proposed by WBI Energy. Alternatives were evaluated using a specific set of criteria. The evaluation criteria applied to each alternative include a determination whether the alternative:

- meets the objectives of the proposed Project;
- has technical and economic feasibility and practicality; and
- offers a significant environmental advantage over the proposed Project.

See, e.g., LA Storage, LLC, 182 FERC ¶ 61,026, at P 14 (2023); *Columbia Gulf Transmission, LLC*, 180 FERC ¶ 61,206, at P 91 (2022); and *Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 61 (2023).

⁵⁰ *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990*, Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, February 2021 (IWG Interim Estimates Technical Support Document).

⁵¹ IWG Interim Estimates Technical Support Document at 24. To quantify the potential damages associated with estimated emissions, the IWG methodology applies consumption discount rates to estimated emissions costs. The IWG’s discount rates are a function of the rate of economic growth where higher growth scenarios lead to higher discount rates. For example, IWG’s method includes the 2.5 percent discount rate to address the concern that interest rates are highly uncertain over time; the 3 percent value to be consistent with the U.S. Office of Management and Budget circular A-4 (2003) and the real rate of return on 10-year Treasury Securities from the prior 30 years (1973 through 2002); and the 5 percent discount rate to represent the possibility that climate related damages may be positively correlated with market returns. Thus, higher discount rates further discount future impacts based on estimated economic growth. Values based on lower discount rates are consistent with studies of discounting approaches relevant for intergenerational analysis. *Id.* at 18-19, 23-24.

⁵² The IWG draft guidance identifies costs in 2020 dollars. *Id.* at 5 (Table ES-1).

⁵³ This value represents “higher-than-expected economic impacts from climate change further out in the tails of the [social cost of CO₂] distribution.” *Id.* at 11. In other words, it represents a higher impact scenario with a lower probability of occurring.

1.0 NO ACTION ALTERNATIVE

Under the No-Action Alternative, the environmental impacts associated with the Project and analyzed in this EA would not occur. WBI Energy would not modify any component of the Project and, consequently, would be unable to provide incremental firm transportation service to Spearfish, South Dakota for the Project shipper for which WBI Energy has an executed Precedent Agreement. A potential negative environmental impact of implementing the no-action alternative may lead the Project shipper (Montana-Dakota) to make more impactful modifications to its distribution system and be unable to fully serve and support demand growth on the southern end of its Spearfish distribution system.

We have prepared this EA to inform the Commission and stakeholders about the expected impacts that would occur if the Project facilities were constructed and operated. The Commission will ultimately determine the Project need and could choose the No-Action Alternative. Because the Commission will ultimately determine Project need, and because staff has not identified a significant impact associated with the proposed action, we do not recommend the No-Action Alternative.

2.0 SYSTEM ALTERNATIVES

System alternatives would use existing, modified, or proposed pipeline systems to meet the purpose and need of the Project. Although modifications or additions to existing or proposed pipeline systems may be required, implementation of a system alternative would deem it unnecessary to modify all or part of the Project (e.g., if adding pipeline on one part of the system could negate the need for new compression). Such modifications or additions could result in environmental impacts that are less than, similar to, or greater than those associated with construction and operation of the Project.

Based on our research, we did not identify any system alternatives that could accomplish the Project purpose without expansion of facilities. Given that the Project makes substantial use of WBI Energy's existing infrastructure, any other pipeline systems evaluated would likely result in similar or potentially greater environmental impacts. Therefore, we do not recommend any system alternatives.

3.0 SITE ALTERNATIVES

WBI Energy is proposing to increase the MAOP of the Deadwood-Central City Lateral; modify equipment at existing infrastructure to the extent practicable to protect facilities due to the MAOP increase; and install, relocate, replace and abandon certain pipeline facilities. Modifications at the existing facilities would minimize environmental impacts when compared to the development of a new pipeline or multiple greenfield aboveground facilities. No environmental issues or resource impacts would lead us to recommend a Project alternative. Further, we did not receive any comments during scoping recommending an alternative. Therefore, we conclude that the proposed action, with our additional recommended measures listed in section D of this EA, is the preferred alternative to meet the Project objective.

D. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, we have determined that if WBI Energy constructs, modifies, and operates the proposed Project in accordance with its application and supplements, and our additional recommended mitigation measures detailed below, approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment. We recommend that the Commission Order contain a finding of no significant impact and include the following mitigation measures be included as conditions to any authorization the Commission may issue.

1. WBI Energy shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. WBI Energy must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director OEP, or the Director's designee, before using that modification.
2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during abandonment, construction, and operation of the project. This authority shall allow:
 - a. the modification of conditions of the Order;
 - b. stop-work authority; and
 - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from Project abandonment, construction, and operation.
3. **Prior to any construction**, WBI Energy shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. As soon as they are available, and **before the start of construction**, WBI Energy shall file with the Secretary any revised detailed survey maps/sheets at a scale not smaller than 1:6,000 with station positions for the facilities approved by the

Order. All requests for modifications of environmental conditions of the order or site-specific clearances must be written and must specify locations designated on these alignment maps/sheets.

WBI Energy's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. WBI Energy's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. WBI Energy shall file with the Secretary detailed maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all facility relocations, staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed that have not been previously identified in filings with the Secretary. Approval for use of each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps, or aerial photographs. Each area must be approved in writing by the Director of OEP, or the Director's designee, **before construction in or near that area.**

This requirement does not apply to extra workspace allowed by the FERC Plan and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas, such as wetlands.

Examples of alterations requiring approval include all facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the authorization and before construction or abandonment by removal begins**, WBI Energy shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. WBI Energy must file revisions to the plan as schedules change. The plan shall identify:
 - a. how WBI Energy will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;

- b. how WBI Energy will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - c. the number of EIs assigned, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions WBI Energy will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change);
 - f. the company personnel (if known) and specific portion of WBI Energy's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) WBI Energy will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. WBI Energy shall employ at least one EI during construction of the Project. The EI shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of the order, and any other authorizing document;
 - d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - e. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, WBI Energy shall file updated status reports with the Secretary on a **monthly** basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on WBI Energy's efforts to obtain the necessary federal authorizations;

- b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally-sensitive areas;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective and remedial actions implemented in response to all instances of noncompliance;
 - e. the effectiveness of all corrective and remedial actions implemented;
 - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by WBI Energy from other federal, state, or local permitting agencies concerning instances of noncompliance, and WBI Energy's response.
9. WBI Energy must receive written authorization from the Director of OEP, or the Director's designee, **before commencing abandonment by removal or construction** of any Project facilities. To obtain such authorization, WBI Energy must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
10. WBI Energy must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, WBI Energy shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been abandoned and constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the conditions in the Order WBI Energy has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. **Prior to construction** at the Deadwood Mainline Transfer Station, WBI Energy shall file with the Secretary of the Commission (Secretary) a visual screening plan for review and written approval by the Director of the Office of Energy Projects (OEP), or the Director's designee, to minimize visual impacts on the nearby residences at the Deadwood Mainline Transfer Station.

E. LIST OF PREPARERS

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