

APPENDIX J

Public Involvement



Department of Energy
Western Area Power Administration
Upper Great Plains Customer Service Region
P.O. Box 35800
Billings, MT 59107-5800

B0401.BL

December 21, 2022

Dear Interested Parties:

This letter is to notify you of the proposed Philip Wind Project (Project) and to request your input on the Project. Philip Wind Partners LLC's proposed Project would involve construction of a 300-megawatt (MW) wind farm generating facility that includes approximately 90 turbines (up to 6.1 MW each) and associated pads. Other Project components would include an underground power collection and communication system, a new substation, a new overhead transmission line, access roads, and a maintenance and operation center. The Project would be located on private land approximately thirteen (13) miles north of Philip, in Haakon County, South Dakota (see enclosed map).

The Project would interconnect with Western Area Power Administration's (WAPA) existing Oahe to New Underwood 230-kV transmission line. As a result, WAPA will provide federal oversight of the preparation of an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA). The EA will evaluate the environmental effects of the proposed Project on resources such as wetlands, vegetation and wildlife, cultural and recreation resources, as well as other social, economic, and environmental effects.

WAPA is announcing a public scoping period for the Project. The scoping period provides an opportunity for the general public, government agencies, tribal governments, and others to identify issues and alternatives that will help WAPA define the scope of the EA.

The public scoping meeting will be held virtually over Zoom Webinar on Thursday, January 19, 2023, from 5:00 to 7:00 pm MT (6:00 pm to 8:00 pm CT). The scoping meeting will be held to provide an opportunity for interested parties to learn about the Project from resource specialists and to submit written and verbal comments. During the meeting, WAPA will give a short presentation about the Project and NEPA scoping process and provide an opportunity to ask questions. To learn more about this Project and to share your ideas, join us at:

Video (preferred)

<https://swca.zoom.us/j/96789099356>

Meeting passcode: 354618

Call-in only:

Phone: (888) 475-4499 (Toll Free)

Webinar ID (access code): 967 8909 9356

The public meeting will be recorded and made available for the public on WAPA's website:
<https://www.wapa.gov/regions/UGP/Environment/Pages/PhilipWind.aspx>

Comments may be submitted in the following ways:

- By mail to:
Western Area Power Administration
Attn: Mr. John Russell
2900 4th Avenue North
Billings, MT 59101
- By voicemail hotline by calling (605) 409-5116
- By email to nepa@wapa.gov with "Philip Wind EA" in the subject line
- In writing or verbally at the virtual public scoping meeting, at link provided above.

For your input to be considered during preparation of the draft EA, WAPA requests comments by **February 13, 2023**. If you have any questions, or need more information about the Project, please contact WAPA using the methods listed above. Thank you for your time and interest in the Philip Wind Project.

Sincerely,

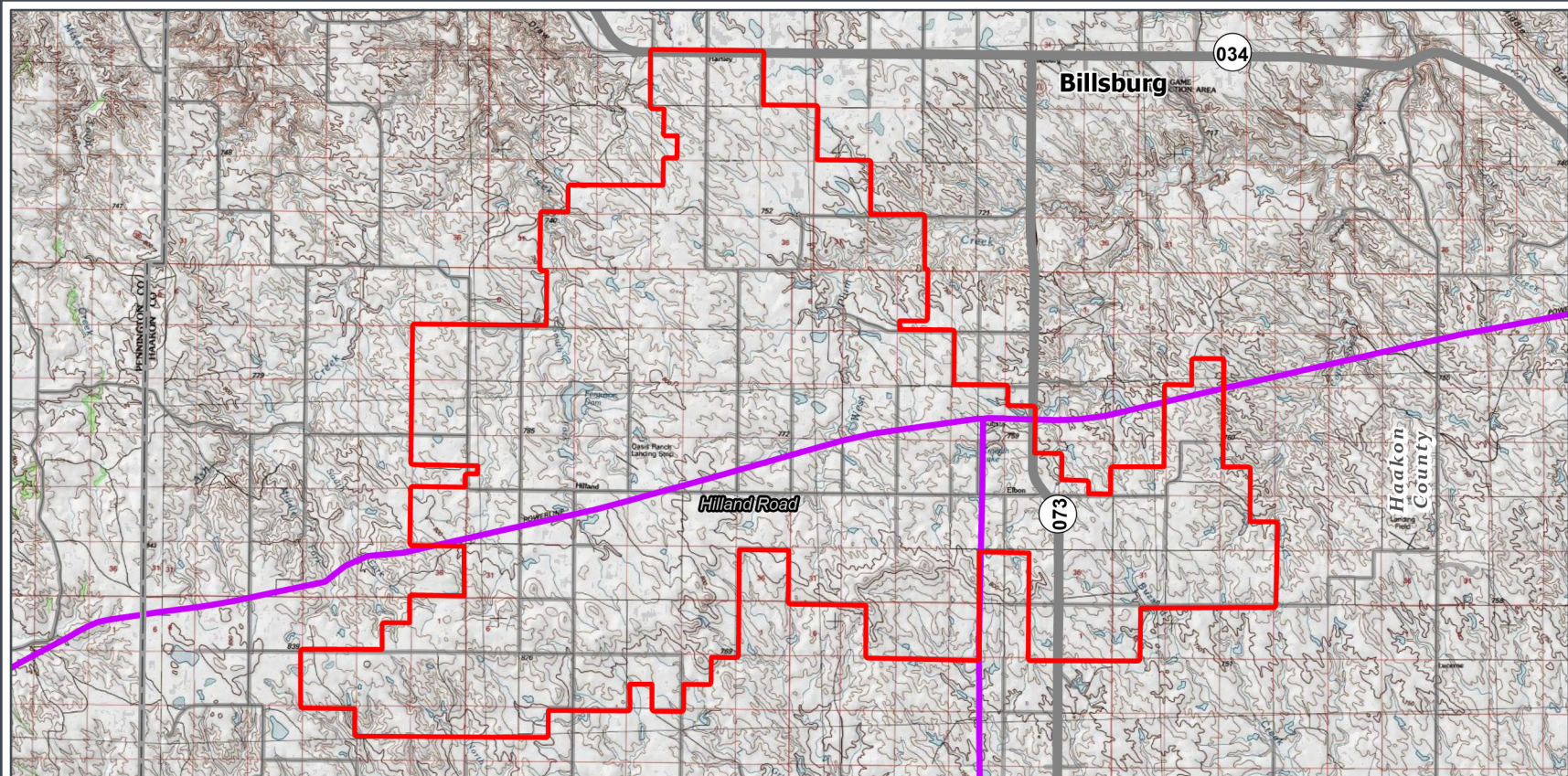
JOHN RUSSELL

Digitally signed by JOHN
RUSSELL
Date: 2022.12.20 11:26:36 -07'00'





John Russell
Environmental Manager

Enclosure

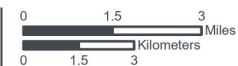
1. Preliminary Project Map
2. Virtual Public Scoping Zoom Webinar instructions
3. Scoping comment form



PHILIP WIND PROJECT Project Overview

-  Transmission Line
-  Roadway
-  Project Boundary
-  County Boundary

Haakon County, SD
NAD 1983 UTM Zone 14N
44.3104°N 101.7678°W



1:205,000



Base Map: USGS National Map,
accessed December 2022
Updated: 12/22/2022
Project No. 75529
Layout:
Project_Overview_Topo_NoDKParcel
Aprx: 75529_PhilipWind

SWCA
ENVIRONMENTAL CONSULTANTS

Philip Wind Project

Virtual Public Scoping Meeting

Thursday, January 19, 2023

5:00 to 7:00 pm MT
(6:00 pm to 8:00 pm CT)

via Zoom Webinar
<https://swca.zoom.us/j/96789099356>
Meeting passcode: 354618

Thank you for your interest in the Philip Wind Project. After reviewing the Project information, please complete the appropriate sections of this form to be included on the project mailing list and/or to provide comments. Comments can be submitted:

- At the scoping meeting
- By phone to (406) 255-2810
- By voicemail hotline to (605) 409-5116
- By email to nepa@wapa.gov with Philip Wind EA in the subject line
- By mail to Mr. John Russell, WAPA Environmental Manager

Visit <https://www.wapa.gov/regions/UGP/Environment/Pages/PhilipWind.aspx> for Project information. Your comments are important to us and will be accepted through Monday, February 13, 2023, for formal consideration in the NEPA process.

Please Print Contact Information Below:

<u>Name:</u>	<u>Organization:</u>
<u>E-mail Address (optional):</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

- ☐ Please e-mail me the web link to the NEPA document when it becomes available (quickest and preferred method).
- ☐ I do not need a copy of the NEPA document.

Please Share Comments, Questions, or Concerns Below (continue on separate sheet if necessary):



Please fold in thirds and tape

Place
postage
here

Mr. John Russell
Environmental Manager - Upper Great Plains Region
Western Area Power Administration
2900 4th Avenue North
Billings, MT 59101

PUBLISHER'S AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA }
 }SS
COUNTY OF HAAKON }

I, Selma Thorson of said County and State, being duly sworn on oath says: PIONEER REVIEW is a weekly newspaper of general circulation, published in PHILIP, in said County and State and has been such newspaper during the times thereafter mentioned; that the said PIONEER REVIEW is a legal newspaper and has been in existence for more than one year immediately preceding the first publication herein mentioned; and has more than 200 bona fide subscribers; that I, the undersigned, am Billing Manager of said newspaper, and have personal knowledge of all facts stated in this affidavit; and that the advertisement headed:

Public Input Encouraged

Philip Wind Partner's LLC

A printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive issues the first publication being on the 29th day of December, 2022, and the last publication on the 29th day of December, 2022, that \$77.00 of the said newspaper; that no arrangement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever

x. Selma Thorson

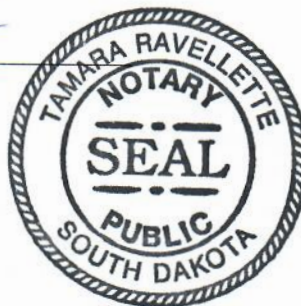
Subscribed and sworn to me before this 31st day of December 2022.

Tamara Ravellette

Notary Public, State of South Dakota

My Commission Expires

January 24, 2026



PUBLIC INPUT ENCOURAGED

Public comments are sought to define the scope and alternatives for an Environmental Assessment of Phillip Wind Partners LLC's proposed wind energy facility in Haakon County to the north of Philip, South Dakota. The proposed project, to be called the Philip Wind Project, would involve construction of a 300-megawatt (MW) wind farm generating facility that includes approximately 90 turbines (up to 6.1 MW each) and associated pads. Support facilities for the wind energy center include an underground power collection and communication system, project substation, temporary meteorological towers, a new overhead transmission line, access roads, and a maintenance and operation center. Construction of the Philip Wind Project is proposed to begin as early as spring of 2024.

Western Area Power Administration (WAPA) will hold one virtual public scoping meeting to provide an opportunity for interested parties to learn about the Project from resource specialists and to submit written and verbal comments. The meeting will be held on Thursday, January 19, 2023, from 5:00 to 7:00 p.m. MT (6:00 pm to 8:00 pm CT), via Zoom Webinar. During the meeting, WAPA will give a short presentation about the Project and the National Environmental Policy Act scoping process. There will also be time for questions and verbal comments.

To learn more about this Project and to share your ideas, join us at:

5:00 to 7:00 pm MT (6:00 pm to 8:00 pm CT) on January 19, 2023, via Zoom Webinar.

Video (preferred): <https://swca.zoom.us/j/96789099356>

Meeting passcode: 354618

Call-in only: Phone: (888) 475-4499 (Toll Free)

Webinar ID (access code): 967 8909 9356.

Comments may be submitted in the following ways:

- By mail to:
Western Area Power Administration
Attn: Mr. John Russell
2900 4th Avenue North, Billings, MT 59101
- Voicemail hotline to (605) 409-5116
- Email nepa@wapa.gov with Philip Wind EA in the subject line
- In writing or verbally at the virtual public scoping meeting

Visit the Project website to learn more at

<https://www.wapa.gov/regions/UGP/Environment/Pages/PhilipWind.aspx>

Comments should be postmarked no later than **February 13, 2023**.

[Published Dec. 29, 2022, at the total approximate cost of \$77.00 and may be viewed free of charge at www.sdpublicnotices.com]

PUBLISHER'S AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA }
 } SS
COUNTY OF HAAKON }

SWCA Environmental Consultants

Public comments are sought to define the scope and alternatives for an Environmental Assessment of Phillip Wind Partners LLC's proposed wind energy facility in Haakon County to the north of Philip, South Dakota. The proposed project, to be called the Philip Wind Project, would involve construction of a 300-megawatt (MW) wind farm generating facility that includes approximately 90 turbines (up to 6.1 MW each) and associated pads. Support facilities for the wind energy center include an underground power collection and communication system, project substation, temporary meteorological towers, a new overhead transmission line, access roads, and a maintenance and operation center. Construction of the Philip Wind Project is proposed to begin as early as spring of 2024.

[Published Jan. 5 & 12, 2023, at the total approximate cost of \$55.73 and may be viewed free of charge at www.sdpublic-notices.com]

X Delma Thomas

Tamara Lavett

January 24, 2026

[Published Jan. 5 & 12, 2023, at the total approximate cost of \$55.73 and may be viewed free of charge at www.sdpublic-notices.com]

Submission ID	Affiliation	Comment	Comment Response
001	U.S. Department of Transportation Federal Highway Administration, South Dakota Division	At this milestone point, I would advise that if it determined that there is potential to affect the safety and/or performance of any federal-aid highway system routes in or around the Project boundaries, then please get in direct contact with the FHWA-SD Division and the South Dakota Department of Transportation (SDDOT) so that our interests can be properly considered with the scoping of this Project.	Comment noted. The proposed Project would follow WAPA's UGP Wind Energy PEIS Best Management Practices for transportation considerations. Project specific details are provided in the Philip Wind Energy Center Draft EA - Section 3.1 - Land Use and Public Facilities, including coordination with SD DOT and Haakon County for specific permits required during construction, also see Section 5.0 - Consultation and Coordination.
002	Private Citizen	Please email me the web link to the NEPA document when it becomes available (quickest and preferred method).	A public notice and meeting notice will be sent when the Draft EA is finalized.
003	Bureau of Land Management, South Dakota Office	Just to verify, there won't be any upgrades, new lines, or anything, as far as the the Oahe to New Underwood 230-kilovolt line? Nothing will happen with that, it'll be used as is and just feed new electricity into it from the wind farm, correct? The reason I bring it up is that over in the Newel area there's a wind farm that feeds the electricity into a WAPA line, but the WAPA line only had a certain amount of capacity left to accept that electricity, and if there would be any more wind turbines or anything that have to enlarge the lines or do something like that but anyway I just wanted to verify that so, thank you.	The proposed Project will not require additional upgrades of the Oahe to New Underwood 230-kilovolt line, other than the Project components discussed in the Philip Wind Energy Center Draft EA - Section 2.1.2.4 - Generation Tie Line and Basin Electric Transmission Line Extension.
004	Private Citizen	I believe I heard Staffan say that, if requested, there would be Tribal cultural surveys in addition to the archaeological and architectural surveys. And I'm just curious if at this point in time, if it's appearing that the cultural surveys will be primarily archaeological going out first and then, if needed later, having tribal surveys, or if it's anticipated that they will be essentially joint surveys with traditional cultural specialists going out with the archaeologists?	Comment noted. WAPA and Philip Wind Partners have contacted 12 Tribal governments to participate in consultation for the proposed Project. Currently, WAPA and Philip Wind Partners are working with the Tribal representatives that have shown interest in the Project and will engage them to participate in the cultural resource field surveys scheduled for fall of 2023. The results of the surveys and Tribal consultation will be updated in the Final EA. The Philip Wind Energy Center Draft EA - Section 3.10 - Cultural Resources and Section 5.3 - Native American Tribes provide the current analysis and list of Tribes consulted.
005	United States Department of the Interior - Bureau of Indian Affairs	We have no environmental objections to the actions as long as the projects comply with all applicable laws and regulations.	Comment noted.
005	United States Department of the Interior - Bureau of Indian Affairs	You should be aware, however, that Tribes or Tribal members may have lands in fee status near the sites of interest. These lands would not necessarily be in our databases, and the Tribes should be contacted directly to ensure all concerns are recognized.	Comment noted.
005	United States Department of the Interior - Bureau of Indian Affairs	We also find that the listed action will not affect cultural resources on Tribal or individual landholdings for which we are responsible. Methodologies for the treatment of cultural resources now known or yet to be discovered—particularly human remains—must nevertheless utilize the best available science in accordance with provisions of the Native American Graves Protection and Repatriation Act, the Archaeological Resources Protection Act of 1979 (as amended), and all other pertinent legislation and implementing regulations.	Comment noted.
006	Private Citizen	Where can agencies and public commenters access resource studies that have been prepared in support of the planning of this wind Project? Such information would allow commenters to provide meaningful input to WAPA's scoping request.	Project Website: https://www.wapa.gov/about-wapa/regions/ugp/environment/philipwind/
006	Private Citizen	Will vibration born (ground) noise be included as part of the noise study?	WAPA's UGP Wind Energy PEIS provides an analysis on ground-borne vibration associated with construction and operation of wind facilities in Section 4.5.2 and Section 5.5.1. Based on the conclusions from this study, the Project's noise study will not include a site-specific ground-borne vibration analysis.
006	Private Citizen	Appropriately, in accordance with the NEPA, the issuance of a Finding of No Significant Impact would be the "target" before any construction may begin.	Comment noted.
007	Private Citizen	Being a local resident in this area that's actually in the boundaries of this proposed Project and receiving the letter in the email was the first time we had heard about it, and our house is actually included in the boundary, which was very concerning.	Thank you for your comment. Not all landowners within the Project boundary will have Project components located on their property. Philip Wind Partners has contacted any landowner with Project components proposed on their property. Please see Philip Wind Energy Center Draft EA Figure 2-1 - Project Layout and Section 1.2 - Philip Wind Partners, LLC Goal and Objective.
007	Private Citizen	What is the benefit to the local community and area for this Project?	The main benefits to the community would be increased revenue for local business, creation of temporary and permanent jobs, property and sales tax increases, and participating landowners receiving benefit from Project agreements. Approximately, 200-300 jobs will be created during construction of the wind farm with those workers living and shopping in the Philip, South Dakota area. Once the Project is built, approximately 6-10 permanent full-time jobs will be created to perform operations and maintenance throughout the life of the wind farm. In addition, South Dakota has a property tax that is based off the actual energy generated at the wind farm, which is anticipated to be approximately \$1-1.5 million dollars that is split between the county, school district and state of South Dakota. Finally, the landowners involved in the Project will receive payments based on the agreements executed with Philip Wind Partners.
007	Private Citizen	Can you explain or help me understand what the impact of the noise from these wind turbines would be on humans, as well as livestock?	WAPA's UGP Wind Energy PEIS provides an analysis of noise impacts from construction and operation of wind facilities in Section 5.5 and human health and safety in Section 5.13. In addition, impacts to livestock are provided in Section 4.5. The Philip Wind Energy Center Draft EA includes a site-specific noise analysis in Section 3.5 - Noise and a noise analysis report is provided as Appendix A - Pre-Construction Noise Analysis for the Philip Wind Farm.
007	Private Citizen	As we think about the location of turbines and the consturction of them, what is the plan for assisting, planning, and improving county roads to access these locations? Because, for instance, the road that I live on would not support heavy equipment to be able to support construction of these turbines, and I realized that there will be service roads into them, such as having an understanding of what Philip Wind Partners will be doing to support that for local residents as well.	Philip Wind Partners will coordinate with SD DOT and Haakon County to determine the appropriate haul routes to be used during construction in accordance with the WAPA's UGP Wind Energy PEIS transportation considerations. The Philip Wind Energy Center Draft EA Section 2.1.2.5 Access Roads and Crane Paths and Section 3.1 - Land Use describe the project-specific components.

007	Private Citizen	What impact is this Project going to potentially have on property values in the area? Because it is going to change aesthetics, it's going to create noise. You're going to have light pollution at night with the flashing lights. What is the impact of that on property value?	WAPA's UGP Wind Energy PEIS provides an analysis of property value impacts associated with wind facilities in Section 5.1. The Philip Wind Energy Center Draft EA provides site-specific analysis in Section 3.11 - Socioeconomics and Section 3.12 - Environmental Justice.
007	Private Citizen	What is the lifespan of a wind turbine? Will it last in operation?	The proposed Project would be designed to operate for 30 years. The Philip Wind Energy Center Draft EA provides specific detail on the Project's lifecycle in Section 2.1.2.8 - Project Life Cycle and Decommissioning.
007	Private Citizen	How do you dispose of/handle the materials that those are made out of? Because that's a lot of material there, and you've got 90 turbines there.	The Philip Wind Energy Center Draft EA - Section 2.1.2.8 - Project Life Cycle and Decommissioning provides detail on disposal of these materials.
007	Private Citizen	This may be a little bit pessimistic, but kind of thinking about the reality of some of these companies. But if Philip Wind Partners were to go bankrupt, who would be responsible for taking care of the turbines or decommissioning them or getting things taken care of from that respect?	The SD PUC requires decommissioning funding in advance to alleviate the risk of decommissioning the Project if Philip Wind were to go bankrupt. See Philip Wind Energy Center Draft EA - Section 2.1.2.8 - Project Life Cycle and Decommissioning for additional information.
008	Private Citizen	When will the final array (i.e., layout of turbines and their associated pads) be determined?	The Philip Wind Energy Center Draft EA - Section 2.1 - Proposed Action provides the preliminary layout of the Project. The Final EA will include the final Project layout, anticipated to be complete in the fall of 2024.
008	Private Citizen	Will that information be made available (at a minimum in a preliminary format) in the draft EA for reviewers and commenters to respond to?	The Wind Facility preliminary layout is available in the Philip Wind Energy Center Draft EA.
008	Private Citizen	What are the approximate lengths of the service roads and gen-tie line necessary for the proposed Project?	Philip Wind Energy Center Draft EA - Section 2.1.2.4 - Generation Tie Line and Basin Electric Transmission Line Extension and Section 2.1.2.5 - Access Roads provide the proposed Project transmission line and access road lengths.
008	Private Citizen	What is the approximate footprint of the proposed operations/service building? Such details are important when asking for input regarding scope of the enviornmental analysis.	The Philip Wind Energy Center Draft EA - Section 2.1.2.2 - Operations and Maintenance Facility provides the proposed footprint, and Section 3.0 Affected Environment and Environmental Consequences provides impacts analysis.
009	Private Citizen	Is this a new transmission line or an update to an old line?	The proposed Project would include the addition of a new generation tie line and the extension of the existing Basin Electric transmission line. Please see Philip Wind Energy Center Draft EA - Section 2.1.2.4 - Generation Tie Line and Basin Electric Transmission Line Extension for specific details of these Project components.
009	Private Citizen	Does WAPA have enough capacity?	WAPA works with Southwest Power Pool (SPP), an agency that manages the wholesale power market in the region of this Project, conducted an analysis of the proposed Project and if the existing transmission line has enough capacity to accept the additional electrons or electricity from the wind farm prior to the interconnection being granted. This analysis, completed by SPP, indicated there was enough capacity on the existing transmission line, and Philip Wind Partners has entered a Generator Interconnect Agreement with SPP. Please see the Philip Wind Energy Center Draft EA - Section 2.1.2.4 - Generation Tie Line and Basin Electric Transmission Line Extension for more detail on the Project.
010	Private Citizen	It would seem that an update to WAPA's existing line may be a reasonable foreseeable action to consider under the cumulative impacts considerations in the draft EA.	The proposed Project would not require additional upgrades of the Oahe to New Underwood 230-kilovolt line. The Philip Wind Energy Center Draft EA - Section 4 - Cumulative Impacts did not identify any reasonably foreseeable generation projects that would add to capacity of the Oahe to New Underwood 230-kilovolt line.
011	Private Citizen	When discussing tower location selection with a project manager from other wind projects, the data used was for consideration of the efficiency of the wind turbines only with zero consideration for the efficiency of the farming operations. For example, the complete lack of symmetry of tower locations often causes massive losses of time and fuel—trying to work around the towers, including safety issues for agricultural aviation. I think it is a deal breaker that it is not factored in as part of the equation for tower locations.	Philip Wind Partners has committed to coordinating siting with landowners, please see Philip Wind Energy Center Draft EA - Table 2-3 - Applicant's Additional Voluntary Environmental Protection Measures and Section 3.1 - Land Use and Public Facilities.
012	Private Citizen	When would construction start?	If the Project is approved, construction would begin as early as summer 2025.
013	Private Citizen	On the final slide it says that the final EA would be published in 2025. And so, will that delay construction?	The Final EA is scheduled to be published in fall of 2024.
014	Private Citizen	It appears that the bat acoustic study was completed in 2019 while there is a current update for habitat underway (which is good). Would that habitat study and whether supportive vegetation exists for the bats (and where) in the Project area dictate updated acoustic studies? Given the change in existing environments in the last 4–5 years due to regional climate change effects, wouldn't that 2019 study beg an update to reflect reality now?	In 2022, Philip Wind Partners conducted additional desktop and field surveys to evaluate the NLEB habitat specifically. In order to tier the Philip Wind Energy Center EA to the UGP Wind Energy PEIS and associated PBA, Philip Wind Partners has committed to the PEIS's best management practices, PBA's NLEB minimization measures and the Applicant's proposed additional voluntary environmental protection measures to reduce potential impacts to bats. These commitments are located within the Philip Wind Energy Center Draft EA Table 2-3. In addition, a Project-specific Bird and Bat Conservation Strategy would be implemented to minimize impacts to avian and bat species.
015	Private Citizen	In addition to Adele's comment/question: Impacts related to decommissioning of wind turbines (i.e., life-cycle analysis) would seem to be appropriately within the scope of the draft EA. The company's recycling program, for example, would be important information.	The structure of the wind turbine, along with much of the equipment in the nacel (gear box, generator, main shaft, etc.), is mostly steel and other metals, which would be recycled. The blades are made of materials that are currently more difficult to recycle and will need to be evaluated at the time of decommissioning for their disposition. All materials will be recycled and/or disposed of in accordance with local, state, and federal guidelines. See Philip Wind Energy Center Draft EA - Section 2.1.2.8 - Project Life Cycle and Decommissioning for more information.
016	Private Citizen	What impact would this project have on migratory birds?	The impacts to migratory birds is discussed in the Philip Wind Energy Center Draft EA - Section 3.7 - Wildlife.
017	South Dakota Department of Agriculture and Natural Resources	Based on the information provided, it appears this Project will have minor impacts to air quality in South Dakota. This impact would be through source and fugitive emissions. In many cases, an air quality permit is required to operate equipment with point source emissions. A permit application can be obtained from the Air Quality or Minerals and Mining Program. Fugitive emissions, although not covered under State air quality regulations, are a common source of public concern and may be subject to local or county ordinances. Please contact your local officials to discuss requirements regarding fugitive emission. For further air quality information, please contact Rick Boddicker, Air Quality Program, telephone number (605)-773-3151.	Air Quality impacts from source and fugitive emissions related to the Project are discussed in the Philip Wind Energy Center Draft EA - Section 3.4 - Air Quality and Climate. An analysis of the construction equipment and associated environmental protection measures are provided to reduce potential impacts as a result of the Project.

017	South Dakota Department of Agriculture and Natural Resources	Based on the information provided, this project will not have adverse environmental effects to drinking water in this area. Should the parameters of your Project change, please reach out to Mark Mayer at (605)-773-6039 or Mark.Mayer@state.sd.us.	Comment noted.
017	South Dakota Department of Agriculture and Natural Resources	Construction can have detrimental effects to surrounding trees if no protective measures are taken. Special construction measures may have to be taken to preserve and protect tree health by avoiding damage to tree roots, stems, or branches. At a minimum, the storage of equipment, machinery, or trucks under or against a tree should be avoided. Barriers or sturdy fencing should be placed around trees that will remain on-site following construction. Barriers should be placed at a minimum of a 1-foot radius from the base of the tree's trunk for every 1 inch in diameter measured 4.5 feet above the ground. This will protect against soil compaction, alteration of the natural soil level under the live canopy, and any damage from occurring to the trunk of the tree. Eighty-five to 90% of a tree's root system lies within the top 6 to 12 inches of soil extending out one to one and a half times the height of the tree. Trenching through this critical root zone could severely destabilize a tree and adversely affect its health. Tunneling under or around the root system is much less damaging and encouraged. Trees often do not die immediately following construction damage but can decline over several months/years. A tree that sustains damage meeting or exceeding the following limits must be removed and, if conditions allow, replaced to maintain the canopy and ecosystem benefits of tree cover: a) The top or main stem of the tree is broken, b) the live crown of the tree is reduced below 30%, c) more than 1/3 of the circumference of a tree's main root system (a root 4 inches in diameter or larger) is injured such that the cambium layer (living tissue) is exposed, d) more than 1/3 of tree's total root system is severed or torn, and e) more than 1/3 of the circumference of the trunk's cambium layer is exposed. For a list of suitable replacement trees or if you have any questions, please contact Amanda Morrison at Amanda.morrison@state.sd.us or (605) 394-2279.	Comment noted. Tree clearing and removal will be evaluated as part of the vegetation clearing design for the proposed Project, which requires considerations pertaining to wildlife, visual, and vegetation resources. The UGP Wind Energy PEIS best management practices will be followed pertaining to any tree removal and are provided in the Philip Wind Energy Center Draft EA - Appendix O. In addition, the PBA NLEB best management practices have additional tree protections and are provided as Appendix K. SD DANR will be contacted for tree replacement and/or any questions.
017	South Dakota Department of Agriculture and Natural Resources	Based on the information provided, this Project is unlikely to have adverse effects on ground water quality. Should the parameters of your Project change, please reach out to Matt Hicks at (605)-773-5337 or Matt.Hicks@state.sd.us.	Comment noted. The proposed Project's impacts to water resources are provided in the Philip Wind Energy Center Draft EA - Section 3.3 - Hydrologic Setting and Water Resources. Philip Wind Partners would adhere to the UGP Wind Energy PEIS best management practices and additional voluntary environmental protection measures to reduce any impacts to water resources.
017	South Dakota Department of Agriculture and Natural Resources	Some solid waste may be generated during this Project. Any solid waste generated that will not be reused in some beneficial manner must be disposed or managed at a permitted solid waste facility. Regional landfills able to accept all solid waste generated are listed on our website: https://apps.sd.gov/NR60SolidWaste/main.html . Only regional landfills are permitted to accept all wastes generated. If you have any questions, please contact Waste Management at (605)-773-3153.	Comment noted. Waste generated due to the Project is discussed in the Philip Wind Energy Center Draft EA - Section 3.13.1.4 - Hazardous Materials and Solid Waste and Table 2-3 Additional Voluntary Environmental Protection Measures.
017	South Dakota Department of Agriculture and Natural Resources	It is not expected that any hazardous waste sites will be encountered within the vicinity of your Project area. However, if road construction is planned for areas within a city or town, the contractor should contact this Department prior to construction. Should any hazardous waste be generated during the implementation of this Project, the generator must abide by all applicable hazardous waste regulations. To determine whether your Project may generate hazardous waste, visit: https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses . If you have any questions please contact Anthony Wagner at (605)-773-3153 or anthony.wagner@state.sd.us.	Comment noted. Waste generated due to the Project is discussed in the Philip Wind Energy Center Draft EA - Section 3.13.1.4 - Hazardous Materials and Solid Waste and Table 2-3 Additional Voluntary Environmental Protection Measures.
017	South Dakota Department of Agriculture and Natural Resources	Demolition or renovation of a building structure may be subject to the South Dakota asbestos requirements. If demolition or renovation is part of this construction Project, or if the scope of the project changes to include demolition or renovation, please contact Anthony Wagner at (605)-773-3153, or anthony.wagner@state.sd.us.	Comment noted.
017	South Dakota Department of Agriculture and Natural Resources	All tributaries, creeks, wetlands, and lakes within the vicinity of this Project are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that water quality standards are not violated. The Project is in the vicinity of Kroetch Lake. This waterbody is classified by the South Dakota Surface Water Quality Standards and Uses Assigned to Lakes for the following beneficial uses: (4) Warmwater permanent fish life propagation waters; (7) Immersion recreation waters; (8) Limited contact recreation waters; and (9) Fish and wildlife propagation, recreation, and stock watering waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that the 30-day average total suspended solids criterion of 90 mg/L and the daily maximum total suspended solids criterion of 158 mg/L are not violated.	Comment noted. The proposed Project's impacts to water resources are provided in the Philip Wind Energy Center Draft EA - Section 3.3 - Hydrologic Setting and Water Resources. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices and additional voluntary environmental protection measures to reduce any impacts to water resources. Construction activities will receive appropriate permits prior to commencement.
017	South Dakota Department of Agriculture and Natural Resources	At a minimum, and regardless of Project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of 1 or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities. A Surface Water Discharge permit may be required if any construction dewatering should occur because of this Project. Contact the Department of Agriculture and Natural Resources for additional information or guidance at 1-800-SDSTORM (1-800-737-8676) or https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/default.aspx . The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment except where authorized under Section 404 of the Federal Water Pollution Control Act. Please contact the U.S. Army Corps of Engineers for more information (605)-224-8531.	Comment noted. The proposed Project's impacts to water resources are provided in the Philip Wind Energy Center Draft EA - Section 3.3 - Hydrologic Setting and Water Resources. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices and additional voluntary environmental protection measures to reduce any impacts to water resources. Construction activities will receive appropriate permits prior to commencement. Wind facility components have been sited to minimize impacts to wetland and water resources. An on-site wetland and water resource delineation will occur prior to construction to determine any impacts. Any necessary USACE, USEPA, state and local permits will be acquired prior to construction.
017	South Dakota Department of Agriculture and Natural Resources	The Inspection, Compliance, and Remediation Program (ICRP) maintains a database of registered storage tanks and spills/environmental events, including petroleum and chemical releases in South Dakota. Our records show eight known spills/environmental events and five registered storage tank facilities near your Project area. We have compiled this information in the attached table. We recommend reviewing our online spills and tanks database regularly as your Project progresses to determine if future spills/environmental events or new registered tanks are in or near your Project area. For more information about tanks and spills/environmental events (including PDF copies of case files), please visit: https://apps.sd.gov/nr42interactivemap .	Thank you for the records search. The Philip Wind Energy Center Draft EA - Section 3.13.1.4 - Hazardous Materials and Solid Waste and Table 2-3 Additional Voluntary Environmental Protection Measures provides the approach Philip Wind Partners would be required to adhere to for potential contaminated or hazardous materials encountered.
017	South Dakota Department of Agriculture and Natural Resources	While we do our best to maintain accurate information about spills/environmental events and registered tanks, in some cases the location information provided to us may have been inaccurate. If contamination is caused by or is encountered during on-site construction activity, that contamination must be reported to the DANR at (605)-773-3296. Contaminated soil that has been excavated should be segregated from clean soil and sampled to determine disposal requirements. Further, any piping, equipment, or other material to be placed in a location where it will be in contact with contaminated soil or groundwater, should be evaluated to determine if it is compatible with the contaminant. If you have questions, please contact Baylee Hoff at baylee.hoff@state.sd.us or (605) 773-3296.	Comment noted. The Philip Wind Energy Center Draft EA - Section 3.13.1.4 - Hazardous Materials and Solid Waste and Table 2-3 Additional Voluntary Environmental Protection Measures provides the approach Philip Wind Partners would be required to adhere to for potential contaminated or hazardous materials encountered.
017	South Dakota Department of Agriculture and Natural Resources	If water is needed during construction that is obtained from surface or ground water, a temporary permit for the use of public water will need to be obtained. If water is supplied by a municipality or rural water system for construction purposes, no additional water permitting is required. Please contact Genny McMath at genny.mcmath@state.sd.us or (605) 773-3352 if you have any questions or find form at https://danr.sd.gov/OfficeOfWater/WaterRights/docs/D2052LDV1-TempApp.pdf .	Comment noted.

018	United States Environmental Protection Agency Region 8	<p>Existing Conditions</p> <p>To describe effects to aquatic resources in the Project area, we recommend the draft EA include the following analyses or descriptions:</p> <ul style="list-style-type: none"> • A clear map and summary of Project area waters and downstream waters, including streams, lakes, springs, and wetlands. It would be helpful if the summary identified high resource value water bodies and their designated beneficial uses (e.g., agriculture, fisheries, drinking water, recreation). • Watershed conditions, including vegetation cover and composition, soil conditions, and areas not meeting desired future conditions. • Surface water information, including available water quality data in relation to current South Dakota Water Quality Standards, stream functional assessments, stream channel/stream bank stability conditions, sediment loads, and aquatic life. • Types, functions, conditions, and acreages of wetlands, riparian areas, and springs. • Available groundwater information. • A map and list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the planning area, including the designated uses of the waterbodies and the specific pollutants of concern potentially affected by on-going activities (e.g., agricultural, including within or adjacent to the defined Project analysis area). 	Comment noted. The proposed Project's water resources are provided in the Philip Wind Energy Center Draft EA - Section 3.3 Hydrologic Setting and Water Resources.
018	United States Environmental Protection Agency Region 8	<p>Water Quality Data</p> <p>Water quality data for the streams and lakes located within the Project area provide important information for evaluation of the influence of the Project on downstream water quality. Such information can then guide management for the Project with the data providing a baseline for future monitoring of impacts. We recommend that the EA provide a summary of available information and monitoring data on water quality for the Project area and downstream waters that could be affected by activities in the Project area, including parameters, such as total phosphorus, total nitrogen, total dissolved solids, total suspended solids, turbidity, and temperature.</p> <p>It will also be important to include water quality data for parameters listed for impaired waterbodies within or downstream of the Project area. South Dakota can further assist in the identification of impaired waters and development of total maximum daily loads for impaired waters under Section 303 of the CWA, as well as in identifying any significant gaps in available data that may be useful in informing a water quality monitoring plan for the Project.</p>	Comment noted. The UGP Wind Energy PEIS analysis of water quality impacts from wind development are predicted to be localized and short in duration and further reduced by the implementation of the best management practices provided. Please see UGP Wind Energy PEIS - Section 5.3 and associated Best Management Practices in the Philip Wind Energy Center Draft EA - Appendix O. The proposed Project's specific water resources are provided in the Philip Wind Energy Center Draft EA - Section 3.3 Hydrologic Setting and Water Resources and Additional Voluntary Environmental Protection Measures are provided in Table 2-3.
018	United States Environmental Protection Agency Region 8	<p>Impacts of Surface Disturbance on Watershed Conditions</p> <p>Surface disturbance is a significant source of sediment to streams, which can smother aquatic habitat, disrupt natural food chains, increase nutrient loads, and alter stream morphology and function. Construction can cause short-term but substantial increases in sediment delivery to streams, and roads modify natural drainage patterns and can increase hillslope erosion and downstream sedimentation on a long-term basis. Evaluating the erosion hazard rating of soils in the Project area can be helpful in identifying areas where siting and construction of roads, collection lines, and turbines could result in damaging levels of soil erosion and sediment delivery to streams. According to our review of soil data presented in the Natural Resource Conservations Service's Web Soil Survey, the erosion hazard of most of the Project area's soils are characterized as a mix of those with "Moderate" and "Severe" erosion hazards. Soils with a "severe" rating are described as follows: "Significant erosion can be expected. Roads require frequent maintenance. Costly erosion control measures are needed." With consideration of this information, we recommend the EA discuss the potential effects from the Project on surface erosion, potential mass wasting on slopes, and delivery of surface sediment and debris to streams within or adjacent to the Project area. We also recommend avoiding surface disturbance in areas with "Severe" erosion hazard to the extent practicable in the final design and configuration of wind turbines and their associated pads.</p> <p>Road-stream crossings are one of the largest chronic inputs of eroded sediment to streams and can cause extensive acute impacts of increased sedimentation through hydrologically connected zones. Changes to the biological components of these connected zones from sedimentation can cause significant consequences to the overall function of the entire watershed ecosystem. With these considerations in mind, we recommend the draft EA include a clear map(s) of road placement in relation to water resources and evaluate the potential impacts of the roads on watershed and aquatic ecosystem structure and function.</p>	<p>Comment noted. The UGP Wind Energy PEIS determined that impacts to soil and water resources are mainly associated with construction and therefore short in duration. Implementation of the UGP Wind Energy PEIS best management practices further reduces the potential impacts to soils and water resources. A Project analysis of water and soil resources is provided in the Philip Wind Energy Center Draft EA - Section 3.2 - Geology, Soil Resources, and Paleontology, Section 3.3 - Hydrologic Setting and Water Resources and Appendix O - UGP Wind Energy PEIS Best Management Practices.</p> <p>The Philip Wind Energy Center Draft EA - Figure 2-1 contains a map with the proposed access road placement for the Project.</p>
018	United States Environmental Protection Agency Region 8	<p>Effects to Stream Function/Condition</p> <p>In addition to impacting water quality, construction of linear facilities and/or roads that cross streams or dislodge erosive soils can have disproportionate and long-term impacts on stream hydrologic, geomorphic, and biological functions, such as sediment transport, nutrient cycling, floodplain interspersation and connectivity, fish spawning, and overall aquatic habitat quality. We recommend identifying where stream crossings would occur and the stream crossing method(s) that would be used for construction of access roads and the underground power collection and communication systems. Specifically, we recommend the draft EA analyze the effects that would occur to stream condition and function based on the stream crossing construction method(s) used, and choose the option that would have the least impacts to stream functions. We also recommend avoiding stream crossings to the extent possible.</p> <p>Construction, increased road use, and introduction of heavy construction equipment and turbine pads can compact soil and disturb or eliminate vegetative cover, decreasing water infiltration and increasing surface runoff and erosion. These changes can have detrimental effects on stream morphology, functions, and values and are magnified on steep slopes or in erosive, unstable soils. The EPA recommends the draft EA analyze changes to runoff, erosion, sedimentation, and stream morphology and function that could occur due to the Project.</p>	<p>Comment noted. The UGP Wind Energy PEIS determined that impacts to soil and water resources are mainly associated with construction and, therefore, are short in duration. Implementation of the UGP Wind Energy PEIS best management practices further reduces the potential impacts to soils and water resources. A Project analysis of soil and water resources is provided in the Philip Wind Energy Center Draft EA - Section 3.2 - Geology, Soil Resources, and Paleontology, Section 3.3 - Hydrologic Setting and Water Resources, and Appendix O - UGP Wind Energy PEIS Best Management Practices. Prior to finalization of the Philip Wind Energy Center EA, a wetland and water resource delineation will be conducted to determine specific waters of the United States—resources located within the Project facility's disturbance footprint.</p>
018	United States Environmental Protection Agency Region 8	<p>Effects to Wetlands and Riparian Areas</p> <p>Wetlands and riparian areas increase landscape and species diversity, support many species of western wildlife, and are critical to the protection of water quality and designated beneficial uses of waterbodies. Installation of wind turbine generators, electric collection and transmission lines, and construction of access roads, substations, switchyards, and maintenance areas all have the potential to affect wetlands in the Project area. Specifically, the draft EA should identify and evaluate specific methods to protect wetlands, riparian areas, and floodplains, including a clear list of avoidance and mitigation requirements and BMPs applicable for construction, operation, and reclamation activities to prevent adverse impacts to these aquatic resources. This list of measures should include, as appropriate, mitigation found in the April 2015 PEIS, and could also include actions such as, use of wetland and riparian habitat buffer zones to avoid adverse effects to these critical resources; the use of stormwater control measures; marking of perennial seeps, springs, and wetlands on maps and on the ground before commencing construction to facilitate their avoidance and protection; and enhanced monitoring of resource conditions for high value wetland and riparian resources. To ensure that wetlands are protected to the greatest extent possible, it may be necessary to consider exclusion of roads or turbines in areas where wetlands or riparian area would be adversely impacted. The EPA recommends the draft EA fully evaluate potential impacts to wetlands and riparian areas that would not be avoided through Project design or siting decisions.</p> <p>Discharge of dredged or fill material into waters of the United States, including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the U.S. Army Corps of Engineers (USACE) and the EPA. We recommend that Philip Wind Partners, LLC and WAPA consult with USACE to make a final determination as to the applicability of CWA Section 404 permit requirements to wetlands that would be impacted by any new construction in the Project area. The EPA encourages this coordination as early as possible in the planning of the proposed Project. To the extent possible, the EA should be developed to provide sufficient information and support for decisions in compliance with the EPA's CWA Section 404(b)(1) Guidelines.</p>	<p>Comment noted. Prior to finalization of the Philip Wind Energy Center EA, a wetland and aquatic resource delineation will occur to determine specific Waters of the US resources located within the Project facility's disturbance footprint. Philip Wind Partners would be required to consult with USACE and USEPA on associated impacts and necessary permitting requirements prior to construction commencing. Please see Philip Wind Energy Center Draft EA - Section 3.3 - Hydrologic Setting and Water Resources and Appendix O - UGP Wind Energy PEIS Best Management Practices for preliminary analysis information.</p>

018	United States Environmental Protection Agency Region 8	<p>Avoidance and Minimization Measures</p> <p>The EPA recommends the development of design elements to avoid aquatic resource impacts wherever possible and mitigation measures to minimize unavoidable impacts to water quality, stream functions and aquatic habitats from surface disturbance, road-stream crossings, and storm water runoff. Such measures include, locating roads away from streams and riparian areas, steep slopes, landslide prone areas or erosive soils whenever possible and providing special protections, such as setbacks from water resources and non-motorized zones for areas with high quality or high value water resources. The EPA further recommends that impacts to aquatic resources determined to be “difficult to replace” under the EPA and USACE Final Rule for Mitigation for Losses of Aquatic Resources (33 Code of Federal Regulations [CFR] Parts 325 and 332; 40 CFR Part 230 [73 Federal Register 19594; April 10, 2008]) be avoided and minimized to the maximum extent practicable, particularly in areas where waterbody crossings could occur. Such resources may include fens, springs, and streams. Unless other resource concerns outweigh aquatic resource impacts, we recommend identifying corridor alignments that minimize potential impacts to these aquatic resources. If waterbody crossings are proposed, we recommend using mitigation measures to stabilize and return stream banks to preconstruction contours and grading and revegetating waterbody crossing areas immediately following construction. We also recommend that hard armoring be limited to only that which is necessary. The EPA supports an overall goal to return construction sites to natural, preconstruction conditions.</p> <p>Events during construction of the Project, including road building and upgrades, such as vehicular spills of hazardous or toxic materials, could result in significantly adverse habitat and water quality impacts. We recommend the draft EA evaluate the risk for such events and the resulting impacts and describe vehicle maintenance facilities (as applicable) and spill and release response capabilities. Best management practices include storing chemicals for Project activities in closed containers with secondary containment in a specific location, identifying areas and procedures for fueling, and providing a protected vehicle washout. We also recommend that a Stormwater Pollution Prevention Plan is included as an appendix to the final EA.</p>	<p>Comment noted. Prior to finalization of the Philip Wind Energy Center EA, a wetland and aquatic resource delineation will be conducted to determine specific waters of the United States—resources located within the Project's disturbance footprint. Philip Wind Partners would be required to consult with the USACE and USEPA on associated impacts and necessary permitting requirements prior to construction commencing. Please see Philip Wind Energy Center Draft EA - Section 3.3 - Hydrologic Setting and Water Resources for Project specific water resource information.</p> <p>A stormwater pollution prevention plan (SWPPP) will be developed if the Project is approved by WAPA, prior to construction. Philip Wind Partners would be required to include applicable measures provided in the UGP Wind Energy PEIS best management practices and Philip Wind Energy Center Draft EA additional voluntary environmental protection measures in the SWPPP.</p>
018	United States Environmental Protection Agency Region 8	<p>Monitoring</p> <p>The inspection, maintenance, and adjustment of BMPs will ensure their effectiveness; therefore, we recommend the EA include a clearly defined monitoring plan for aquatic resources, including an operational plan for finding and solving runoff problems. The EPA recommends WAPA and Philip Wind Partners, LLC consider information collected as a part of monitoring efforts conducted for other existing commercial wind farms in South Dakota and elsewhere, including the existing Campbell County Wind Farm Project, to inform the design of the proposed Project, as well as considerations around avoidance, minimization, and mitigation of unavoidable impacts from the proposed Project. We recommend that the draft EA describe the mechanism by which information from monitoring efforts for existing, operational wind project(s) could be used to inform the design, construction, and operation of the proposed Project and whether there would be a mechanism for sharing monitoring results with the public for the proposed Project.</p>	<p>Comment noted. A stormwater pollution prevention plan (SWPPP) will be developed if the Project is approved by WAPA, prior to construction. Philip Wind Partners would be required to include inspection and monitoring requirements in the SWPPP to meet all federal, state, and local permit and regulation requirements. It is not typical that private entities share SWPPP inspection and monitoring reports since the information is typically confidential and proprietary in nature.</p>
018	United States Environmental Protection Agency Region 8	<p>Wildlife</p> <p>The EPA appreciates Philip Wind Partners, LLC’s ongoing extensive studies of wildlife resources, particularly for eagles and other migratory birds, in the Project area. We recommend coordinating with the U.S. Fish and Wildlife Service and South Dakota Game, Fish and Parks officials during evaluation of all existing wildlife resources and migration corridors and impacts from micro siting decisions and avoidance measures. The EPA also recommends conducting independent and transparent postconstruction monitoring of raptor, avian, and bat deaths or injuries to help inform mitigation and calculating any compensatory mitigation amounts for the loss of ecologically important, federally protected birds. We recognize that any consultation around endangered species would be achieved in accordance with the Programmatic Biological Assessment (PBA) developed in association with the 2015 Wind PEIS. The PBA identifies avoidance and minimization measures to address potential adverse impacts on listed species in the proposed Project area. In accordance with the PBA process, the EPA encourages WAPA to fully disclose Philip Wind Partners, LLC’s commitments to implement appropriate avoidance and minimization measures for protected species from effects of the proposed Project in the EA.</p>	<p>Comment noted. The Philip Wind Energy Center Draft EA - Section 3.7 - Wildlife and Section 3.8 - Threatened and Endangered Species provides Project-specific findings and potential impacts of the Project. Applicant-Committed Natural Resources Setbacks for Turbine Locations are provided in Table 1-1 of the Draft EA document. WAPA and Philip Wind Partners have completed multiple agency consultation meetings provided in the Draft EA - Section 5.1 - List of Federal Agencies and Section 5.2 List of State Agencies. In accordance with the UGP Wind Energy PEIS and associated PBA Consistency Evaluation Forms, Philip Wind Partners would be required to adhere to all associated minimization measures for specific species with the potential to occur on-site as provided in the Draft EA - Appendix K. USFWS has concurred with PBA CEF forms and associated findings for the Project.</p>
018	United States Environmental Protection Agency Region 8	<p>Noxious Weeds</p> <p>Management of noxious weeds is an important issue to address in the EA since these species tend to gain a foothold where there are disturbances to the landscape. We recommend the EA provide information on the current state of invasive species in the Project area and how alternatives may impact distribution and prevalence of invasive species. We further recommend that the EA disclose specific management actions that will address invasive species through prevention, early detection, rapid response, and restoration and rehabilitation. If any herbicides will be used to treat noxious weeds, we recommend disclosing any potential hazards related to the application of the chemicals and describing what actions will be taken to minimize impacts of toxic substances released into the environment.</p>	<p>Comment noted. The Philip Wind Energy Center Draft EA provides discussion on noxious weeds within the vicinity of the Project in Section 3.6 - Vegetation. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices and additional voluntary environmental protection measures provided in the Draft EA Table 2-3.</p>
018	United States Environmental Protection Agency Region 8	<p>Consistent with Executive Orders 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (86 Federal Register 7009 [January 25, 2021]) and 14008, Tackling the Climate Crisis at Home and Abroad (86 Federal Register 7619 [February 1, 2021]), the EPA recommends meaningfully engaging with rural communities and stakeholders to understand their experiences and address their concerns with respect to the potential impacts from the proposed Project to the human and natural environments. Rural communities (including subsistence households) are often more closely linked to ecosystems and their services, making it especially important that people living in such communities have opportunities for input into decision-making about local land use and utilization of natural resources, including how federal actions may affect their access to and management of natural resources and active agricultural lands, as well as resources of traditional, cultural, and religious significance to tribal communities.</p>	<p>Comment noted. The Philip Wind Energy Center Draft EA - Section 3.1 - Land Use, Section 3.12 - Environmental Justice, and Section 5.0 - Consultation and Coordination provide an analysis of community impacts and public engagement as a result of the proposed Project.</p>
018	United States Environmental Protection Agency Region 8	<p>Consultation with Tribal Governments</p> <p>The EPA notes WAPA’s plans for consultation with Tribal governments given the proximity of the Project area to Tribal lands. It is especially important that formal government-to-government consultation take place early in the scoping and design phase of the Project to ensure that all issues are adequately addressed in the EA. Principles for interactions with tribal governments are outlined in the presidential Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships (January 26, 2021), and Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000).</p> <p>The EPA recommends that the EA summarize the results of tribal consultation for the Project and identify the main concerns expressed by the tribes located historically in these areas about the proposed Project and how those concerns are addressed. As a resource, we recommend the document Tribal Consultation: Best Practices in Historic Preservation, published by the National Association of Tribal Historic Preservation Officers.</p>	<p>Comment noted. WAPA and Philip Wind Partners have contacted 12 Tribal governments to participate in consultation for the proposed Project. Currently, WAPA and Philip Wind Partners are working with the Tribal representatives that have shown interest in the Project and will engage them to participate in the cultural resource field surveys scheduled for fall of 2023. The results of the surveys and Tribal consultation will be updated in the Final EA. The Philip Wind Energy Center Draft EA - Section 3.10 - Cultural Resources and Section 5.3 - Native American Tribes provide the current analysis and list of Tribes consulted.</p>
018	United States Environmental Protection Agency Region 8	<p>Using Accessible Mechanisms to Address Systemic Barriers</p> <p>Limited broadband and media access in rural locations may warrant using various outreach strategies, such as email, letter, phone calls, and advertising of public meetings in local community venues (e.g., at markets, community centers, and community events). Meaningful engagement can also be fostered by presenting a clear Project purpose, adequate information, and associated stakes, and continuing to provide timely information and opportunities for input on an ongoing basis.</p> <p>Limited broadband access by members of rural communities may warrant holding public meetings about the proposed Project in rural locations, in addition to providing an option for virtual participation and at times when community members are most likely to be able to participate. In planning meetings, we recommend accounting for working hours and harvest times, driving distances, winter weather conditions, and cultural and seasonal practices and events (e.g., tribal ceremonies or local fish and game season openings).</p>	<p>Comment noted. The Philip Wind Energy Center Draft EA - Section 5 - Consultation and Coordination provides the public engagement and outreach conducted for the Project to date. Due to health and safety concerns, the Project agency and public scoping meetings were held virtually. WAPA will take this comment into consideration for further public and agency meetings for the project. The Philip Wind Energy Center Draft EA - Appendix J - Public Involvement provides the results of these notices and advertisements.</p>

018	United States Environmental Protection Agency Region 8	The EPA recommends that the draft EA consider both impacts and benefits of the Project on social structures, at both the community and family-level and, therefore, meaningful engagement with rural stakeholders is necessary to fully inform such an analysis. Engaging trusted community intermediaries and tailoring engagement to distinct segments of the population can also build trust, as can walking the Project area to facilitate mutual understanding of the circumstances and concerns facing rural stakeholders. Potential disconnection of rural communities from largely urban-based political power structures and limited organization and influence over the factors that impact their well-being make such outreach and engagement strategies especially important. We recommend that the EA describe both the process and outcome of engagement with rural communities, including how their concerns were addressed in the consideration of siting alternatives. As part of this, we recommend that the EA include, as an appendix, who was contacted and how.	Comment noted. The Philip Wind Energy Center Draft EA -Section 1.2 - Philip Wind Partners' Goal and Objective provides a summary of how landowners' and stakeholders' input would be considered during design and siting. The Draft EA - Section 5 - Consultation and Coordination provides the public engagement and outreach conducted for the Project to date. The public and agency comments and WAPA responses are provided in Appendix J - Public Involvement.
018	United States Environmental Protection Agency Region 8	Cumulative Impacts and Overburdened Communities The EPA recommends the draft EA consider and disclose impacts to communities from the proposed Project considering impacts from past, present, and reasonably foreseeable planned actions. Specifically, we recommend that the draft EA consider whether local communities may already be experiencing existing pollution, social/health burdens, or economic burdens from changes in existing land use and how the proposed Project may potentially result in disproportionate impact in that context	Comment noted. The results of the proposed Project impacts on these communities is provided in the Philip Wind Energy Center Draft EA - Section 3.11 - Socioeconomics, Section 3.12 - Environmental Justice and Section 4 - Cumulative Impacts.
018	United States Environmental Protection Agency Region 8	We also recommend that the draft EA consider cumulative impacts to long-standing local livestock operations in the proposed Project area and coordinate with local residents to understand potential impacts to their operations during construction, operations and maintenance of the proposed Project.	Comment noted. Philip Wind Partners has committed to coordinating siting with landowners and would be required to adhere to the proposed practices in the Philip Wind Energy Center Draft EA - Table 2-3 - Applicant's Additional Voluntary Environmental Protection Measures and Appendix O - UGP Wind Energy PEIS Best Management Practices to minimize impacts to these operations.
018	United States Environmental Protection Agency Region 8	The EPA recommends that the draft EA describe the nature of cumulative impacts from the proposed wind farm to the rural nature of the communities in and around the Project area. Given the predominately rural character of the Project area and Phillip Wind Farm, the proposed Project would further introduce industrial components from wind energy infrastructure to the landscape. We recommend that the draft EA discuss the introduction of increased industrial effects common to operating wind generation projects, such as increased dust, sound, vibration, and flicker effects to the rural community. Full consideration of cumulative impacts from the proposed Project area would be well served by on-going, meaningful outreach with Project area residents, community representatives (such as local farmers and livestock ranchers), and tribal leaders, particularly in developing an understanding of such effects to public health, local agricultural activities, and rural ways of life.	Comment noted. A broad analysis of these impacts is provided in the UGP Wind Energy PEIS which this document tiers to. Project-specific components are discussed in the Philip Wind Energy Center Draft EA - Section 4 - Cumulative Impacts.
018	United States Environmental Protection Agency Region 8	Impacts to Local Infrastructure While we understand that construction of new roads and improvement of existing roads to access individual turbines and other ancillary facilities is a part of the proposed Project, it is not clear if the proposed Project would result in increased loads, impacts, or burdens on local infrastructure, including roads and local utilities. The EPA recommends that the draft EA examine whether the existing infrastructure can handle increased burden (temporary and permanent).	Comment noted. The proposed Project would follow WAPA's UGP Wind Energy PEIS best management practices for transportation considerations to minimize any impacts to local infrastructure. Project-specific analysis is provided in the Philip Wind Energy Center Draft EA - Section 3.1 - Land Use and Public Facilities, including coordination with SD DOT and Haakon County for specific permits required during construction, also see Section 5.0 - Consultation and Coordination. In addition, proposed Project roads and construction access is discussed in the Draft EA - Section 2.1.2.5 Access Roads and Crane Paths.
018	United States Environmental Protection Agency Region 8	We further recommend that the draft EA assess potential impacts from increased trash and disposal of solid wastes (including hazardous waste) at local collection sites due to Project construction and decommissioning, and increased use of local roads and associated damages, such as berm damage and wash-boarding of roads, leading to increased maintenance costs and blading of roads.	Comment noted. The Philip Wind Energy Center Draft EA - Section 2.1.2.8 - Project Life Cycle and Decommissioning provides details on disposal of these materials. In addition, the Draft EA includes mitigations to reduce these impacts in Section 3.13 - Health and Safety and Appendix O - UGP Wind Energy PEIS Best Management Practices.
018	United States Environmental Protection Agency Region 8	We recommend that WAPA and Philip Wind Partners, LLC consider the potential for increased monitoring and emergency response costs as a part of this analysis.	Comment noted. WAPA monitors all our facilities with a 24/7 supervisory control and data acquisition (SCADA) system. This system monitors and sends data on the position and condition of facilities to its dispatch center, which is continuously monitored. In the event of an abnormal situation, personnel are dispatched to the site to address the issue. Each WAPA site has a 911 address registered. Emergency contacts and phone numbers are maintained by the maintenance crews and posted at the site and with dispatch in case of an emergency. Whenever WAPA personnel are on-site they check-in and out with dispatch (normal procedure) for site awareness and safety.
018	United States Environmental Protection Agency Region 8	(4) Predictable Changes in the Affected Environment The EPA recommends that the EA describe how the Project would be affected by ongoing and foreseeable changes and trends in the affected environment—for instance, under a scenario of continued decreasing precipitation days, changing frequency of intense storms and related flood events, and increasing drought intensity in the Project area. Full consideration of influences from the Project setting on the proposed Project may inform necessary design modifications to enhance Project resiliency and changes to operational assumptions for determining resource supplies, system demands, system performance requirements, and operational constraints. The US Climate Resilience Toolkit (https://toolkit.climate.gov/) serves as a repository of information related to climate resilience in the United States, including steps to build resilience, case studies, expertise, and special topic areas, including renewable energy technology development. The EPA's Climate Change Indicators (https://www.epa.gov/climate-indicators) presents a key set of indicators related to the causes and effects of climate change. EPA partners with various government agencies, academic institutions, and other organizations compile these indicators that are used to understand and track the science and impacts of climate change. In addition, we suggest that this Project draft EA consider resiliency and adaptation measures based on how future precipitation and flood trends and deleterious impacts due to long-term, severe drought conditions already being experienced in the proposed Project area may impact the Project and the ability of Philip Wind Partners, LLC to effectively protect the resources in the Project area from Project-related impacts. The Fourth National Climate Assessment released by the U.S. Global Change Resource Program (https://nca2018.globalchange.gov), contains scenarios for regions and sectors. Using NCA or other peer-reviewed scenarios to inform the NEPA analysis and possible changes to the proposal can improve the ability of Philip Wind Partners, LLC to build in resilience and preparedness in their management plans for persistent alterations in the existing environmental setting.	The Philip Wind Energy Center Draft EA - Section 3.4 - Air Quality and Climate provides an analysis of the proposed Project impacts. Draft EA - Table 2-3 - Applicant Additional Voluntary Environmental Protection Measures and Appendix O - UGP Wind Energy PEIS Best Management Practices provide a comprehensive list of measures proposed to reduce emissions provided any alterations to the environmental setting due to climate change.

018	United States Environmental Protection Agency Region 8	<p>(5) Greenhouse Gas Considerations</p> <p>NEPA provides federal agencies the opportunity to analyze and disclose potential negative and beneficial impacts from a proposed energy project and to build its internal base of knowledge and expertise. The EPA supports informed development of renewable energy generation facilities to meet demand for new sources of electricity. Such energy sources are consistent with decarbonization pathways that are necessary to meet science-based targets for greenhouse gas reductions as articulated in "The Long-term Strategy of the United States: Pathways to Net Zero Greenhouse Gas Emissions by 2050" (November 2021).</p> <p>We have reviewed and appreciate the analysis and discussion of greenhouse gas (GHG) emissions related to construction, operation, and decommissioning of land-based wind development found in Section 5.2.1 of the WAPA PEIS (DOE/EIS-0408). As this EA will be tiered to the 2015 PEIS, we recommend the EA present project-level analysis of GHG emissions for construction, operation, and decommissioning of the proposed Project. We recommend the EA analyze and discuss GHG emissions in the context of national GHG reduction and state reduction targets and how the Project would support achievement of those goals or targets. In particular, we recommend that the EA discuss potential reductions in regional GHG emissions from the proposed Project, as predicted in the WAPA's 2015 PEIS. We suggest that WAPA consider disclosing climate benefits from the Project using the estimated social cost of GHGs (SC-GHG) established by the Interagency Working Group on SC-GHG, as appropriate, to provide useful information to the public and WAPA decision makers around the GHG emissions benefits from wind energy infrastructure. The SC-GHG provides a comprehensive estimate (in dollars) of the long-term damage done by GHG emissions each year from existing or planned increases in fossil fuel-based sources of energy, and this dollar figure can be used to represent the value of damages avoided due to GHG reduction actions (e.g., the proposed wind energy Project to meet future increased demand).</p>	Comment noted. The Philip Wind Energy Center Draft EA - Section 3.4 - Air Quality and Climate provides an analysis of the proposed Project's lifecycle emissions and impacts to greenhouse gases (GHG). The analysis provided uses the EPA's MOVE3 model to calculate total emissions based on the equipment used and provides a brief discussion of the estimating the results in terms of the social costs of GHG.
019	South Dakota Department of Game, Fish and Parks	<p>The South Dakota Natural Heritage Program monitors species at risk. Species at risk are those that are listed as threatened or endangered at the state or federal level or those that are rare. Rare species are found at the periphery of their range, have isolated populations, or are species for which we simply do not have extensive information. A list of species monitored by the Natural Heritage Program can be found at https://gfp.sd.gov/natural-heritage-program/. We recommend Philip Wind Partners continue to request a yearly database search until the Project is constructed to ensure that developers are aware of changing patterns in wildlife use at a site. Please note many places in South Dakota have not been surveyed for rare or protected species, and the absence of a species from the database does not preclude its presence from the Project area.</p> <p>Species records can be requested through the Natural Heritage Program at this link: https://gfp.sd.gov/forms/heritagedata/. Alternatively, GFP has an online Environmental Review Tool available for project planning purposes: https://ert.gfp.sd.gov/. This tool is free to use and has several publicly available spatial layers, as well as the capability to generate a report of potential species that may be present. Please note that this tool will not give specific locations of sensitive species—only a list of potential species that may be found in the Project area.</p> <p>We have completed an initial search of the Project area and found the following records within 5 miles of the proposed Project boundary:</p> <ul style="list-style-type: none">- Three prairie dog colonies within the project boundary, and an additional four prairie dog colonies within 5 miles of the Project boundary.- A great blue heron (<i>Ardea herodias</i>) nesting colony within the Project boundary (last observed in 2011)- A burrowing owl (<i>Athene cunicularia</i>; Species of Greatest Conservation Need) nest approximately 3.6 miles south of the Project boundary (last observed in 2010).- A swift fox (<i>Vulpes velox</i>; state threatened) den site approximately 3.6 miles south of the Project boundary (last observed 2010). <p>Additionally, several Bald Eagle (<i>Haliaeetus leucocephalus</i>) nests were identified along the Belle Fourche River north of the Project area (9–13 miles) and the Cheyenne River, west of the project area (20 miles). Although these records were more than 10 miles away, these two river drainages appear to support numerous bald eagle nests and may influence eagle activity within and near the Project area. Our purpose in sharing this information is to assist with risk assessment and the decision on whether the Project will seek an eagle take permit through the USFWS. We had previously urged Philip Wind Partners to consult with the USFWS further on this issue.</p>	<p>Comment noted. The Philip Wind Energy Center Draft EA provides an analysis of potential impacts to wildlife in Section 3.7 - Wildlife and Section 3.8 - Special-Status Species. The Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations and Table 2-3 - Applicant Additional Voluntary Environmental Protection Measures provide a list of additional measures proposed to protect wildlife. Philip Wind Partners have also committed to developing and implementing a Bird and Bat Conservation Strategy (BBCS).</p> <p>Resource survey reports are provided as appendices to the Draft EA: Appendix B. Eagle Utilization Distribution Monitoring Report, Appendix C. Whooping Crane Habitat Assessment Report, Appendix D. Prairie Dog Colony Status and Mapping Report, Appendix E. Northern Long-eared Bat Habitat Assessment Report, Appendix F. Raptor Nest Survey Report (available upon request), Appendix G. Prairie Grouse Lek Survey Report (available upon request), Appendix H. Grassland Habitat Assessment Report, and Appendix I. Water Resource Analysis Report</p> <p>WAPA and Philip Wind Partners will continue to consult with the USFWS/SDGFP on the proposed Project and potential impacts to wildlife during the development of the BBCS.</p>
019	South Dakota Department of Game, Fish and Parks	<p>Grasslands are of high conservation value in South Dakota, and many acres are converted to cropland annually. Approximately 70% of the native mixed-grass prairie has been lost in eastern South Dakota, and approximately 32% has been lost in western South Dakota (Wright and Wimberly 2013; Bauman et al. 2016; Bauman et al. 2018). Untilled grasslands, large grassland blocks, and grasslands with native plant species are of particular importance. Based on the information presented at the January 13th agency meeting, Philip Wind Partners, LLC is proposing to avoid placing Project infrastructure in untilled grasslands and large grassland blocks.</p> <p>Other grassland types such as native rangeland, grazed grasslands (with native plant species), pasture (grazed grasslands with non-native plant species), and Conservation Reserve Program lands (formerly tilled lands planted to vegetative cover for erosion control and wildlife habitat) also serve as wildlife habitat. Although various patches of grassland habitat can appear in “better” or “worse” condition based on vegetation height and plant species composition, GFP considers all grassland habitat as important for wildlife and continues to recommend avoiding development in these grassland types in addition to avoiding undisturbed grasslands.</p>	Comment noted. The Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations and Section 3.6 - Vegetation provide information pertaining to avoidance of natural grasslands and Section 1.2.1 - Project History and Design Refinement provides detail on avoidance measures taken during siting.
019	South Dakota Department of Game, Fish and Parks	<p>The prairie pothole region of South Dakota supports a wide diversity of bird species (~80 species; Johnson et al. 1997). Wetland birds (e.g., rails, ibis, herons, bitterns, ducks, whooping cranes, etc.) can be susceptible to direct strikes with wind turbines (Johnson et al. 2002). Wind turbines can also displace nesting waterfowl pairs up to 800 meters (Loesch et al. 2013). Displacement of breeding waterfowl from high quality habitats could result in increased predation or reduced reproduction in and around wind energy facilities (Loesch et al. 2013). This Project falls outside of the prairie pothole region of South Dakota. However, there may be small, isolated wetlands and streams present in the Project area. Philip Wind Partners, LLC proposed to avoid siting turbines adjacent to wetlands and streams within the Project area.</p>	Comment noted. The Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations, Table 2-3 Applicant Additional Voluntary Environmental Protection Measures, Section 3.3 - Hydrologic Setting and Water Resources, Section 3.6 - Vegetation, Section 3.7 - Wildlife and Section 3.8 - Special-Status Species provide information pertaining to avoidance of wetlands and Section 1.2.1 - Project History and Design Refinement provides detail on avoidance measures taken during siting.
019	South Dakota Department of Game, Fish and Parks	<p>Grassland nesting bird populations have been declining faster than any other bird group in North America (Rosenberg et al. 2019). Many grassland nesting bird species require large tracts of open, contiguous grasslands. Placement of turbines and associated infrastructure (e.g., roads) in large, intact grassland parcels can fragment habitat and displace certain species of grassland dependent birds, such as prairie grouse (sharp-tailed grouse and greater prairie chickens), western meadowlark (<i>Sturnella neglecta</i>), upland sand piper (<i>Bartramia longicauda</i>), grasshopper sparrow (<i>Ammodramus saviannarum</i>), and chestnut collared longspur (Pruett et al. 2009; Shaffer and Buhl 2015; Bakker 2020). Graff et al. (2016) found that direct mortality rates of turbines sited in predominately grassland (1.86 deaths/MW) vs. predominately cropland (2.55 deaths/MW) habitats in North and South Dakota were similar. Sites in grassland habitats resulted in mortalities of a greater diversity of species (30) vs. sites in cropland (9). To avoid impacts to grassland nesting birds, Philip Wind Partners, LLC is proposing to avoid siting turbines in in-tact grasslands within the Project area and siting turbines in previously disturbed areas (e.g., cropland). GFP further recommends minimizing impacts to prairie grouse by using a 1-mile setback of Project infrastructure from any documented prairie grouse leks. This 1-mile buffer recommendation is based on data collected on hen prairie grouse in the Fort Pierre National Grasslands in South Dakota (Kirschenmann 2008) and is intended to minimize disturbance from Project infrastructure to important nesting and brood-rearing habitat. Philip Wind Partners, LLC is proposing to site turbines at least 1 mile from known prairie grouse leks within the Project area to minimize disturbance to prairie grouse.</p> <p>Based on discussions with Philip Wind Partners, LLC on January 13th, 2023, the Project proposes to avoid untitled grasslands within the Project area. However, if changes occur and impacts to grassland habitats result from Project construction, GFP recommends mitigation in the form of voluntary habitat offsets/compensation. Shaffer et al. (2019) provides a science-based framework that calculates biological values lost by development in grassland or prairie pothole habitats. If Philip Wind Partners, LLC proposes any voluntary habitat offsets for unavoidable impacts to grasslands, GFP suggests using the Schaffer et al. (2019) framework and associated models. Additionally, Shaffer et al. (2022) also provides a tutorial on how to use the Avian-impact Off-set method that was developed in Shaffer et al. 2019.</p>	Comment noted. The following commitments are provided in the Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations (no turbines sited on natural [unbroken] grasslands), Table 2-3 Applicant Additional Voluntary Environmental Protection Measures, Section 3.3 - Hydrologic Setting and Water Resources, Section 3.6 - Vegetation, Section 3.7 - Wildlife, and Section 3.8 - Special-Status Species provide information pertaining to avoidance of natural grasslands and Section 1.2.1 - Project History and Design Refinement provides detail on avoidance measures taken during siting. In addition, a Bird and Bat Conservation Strategy will be developed for the Project. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices.

019	South Dakota Department of Game, Fish and Parks	Bat mortality at wind energy facilities is one of the major concerns regarding wind energy impacts on wildlife (Arnett et al. 2016; O'Shea et al. 2016). Postconstruction mortality surveys from existing wind energy facilities have shown that migratory tree-roosting bats, such as the hoary bat (<i>Lasiurus cinereus</i>), eastern red bat (<i>Lasiurus borealis</i>), and silver-haired bat (<i>Lasionycteris noctivagans</i>), have the highest rates of mortality during their fall migration at wind energy facilities. Philip Wind Partners, LLC is proposing to minimize impacts to tree roosting bats by siting turbines at least 1,000 feet away from suitable bat habitat, such as wood draws, present on the Project area.	Comment noted. The Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations provides setbacks for siting turbines on the proposed Project. In addition, a Bird and Bat Conservation Strategy would be developed for the Project. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices.
019	South Dakota Department of Game, Fish and Parks	Prairie dog colonies may concentrate foraging raptors both during the breeding season and during migration. Many other species, such as the black-footed ferret (a federally endangered species), swift fox (a state threatened species), and burrowing owls (a species of greatest conservation need) will use abandoned prairie dog burrows. GFP reported records of three prairie dog colonies within the Project area. Philip Wind Partners, LLC proposes to avoid siting turbines within and immediately adjacent to prairie dog colonies to reduce the risk of foraging raptors colliding with wind turbines.	Comment noted. The Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-committed Natural Resources Setbacks for Turbine Locations is applicable to prairie dog colonies (no turbines sited within 500 meters) and additional setbacks for other applicable species.
019	South Dakota Department of Game, Fish and Parks	Raptors (hawks, eagles, falcons, kestrels, owls, vultures, etc.) can be adversely affected by improperly sited wind energy facilities (Watson et al. 2018). Wind turbines can directly affect raptors via mortality from turbine blade strikes. Some research also suggests displacement of nesting raptors from suitable habitat (Hunt and Hunt 2006; Higgins et al. 1996). Turbines placed near escarpments or cliffs may pose a greater threat to soaring raptors due to the use of orographic updraft. Turbines sited near roosting sites, known nest locations, known stop-over sites, forest edges, and proximity to water could also increase the risk of turbine strikes to raptors. On-going research and modeling efforts from the National Renewable Energy Lab suggest that collision risk for Golden Eagles is related to a combination of atmospheric updraft (e.g. thermal currents), as well as orographic updraft (https://www.nrel.gov/news/program/2021/novel-modeling-tool-seeks-insight-into-eagle-flight.html). The modelling efforts associated with this research are not yet available for use; however, we provide this information for the Philip Wind Project to consider when assessing risk to soaring raptors (specifically eagles) and the decision of whether the Project will pursue an eagle take permit.	Comment noted. The Philip Wind Energy Center Draft EA - Table 1-1 - Applicant-Committed Natural Resources Setbacks for Turbine Locations provides setbacks for siting turbines on the proposed Project. In addition, a Bird and Bat Conservation Strategy (BBCS) would be developed for the Project. Philip Wind Partners would be required to adhere to the UGP Wind Energy PEIS best management practices. WAPA and Philip Wind Partners will continue to consult with USFWS/SDGFP on the proposed Project and potential impacts to wildlife during the development of the BBCS.
019	South Dakota Department of Game, Fish and Parks	The whooping crane is a state and federal endangered species with only one naturally occurring population. Members of this population pass through South Dakota as they migrate to and from Aransas National Wildlife Refuge in Texas to Wood Buffalo National Park in Canada. Whooping Cranes can be spotted almost anywhere in South Dakota during migration (even as far west as Rapid City, South Dakota). However, reported sightings are most frequent near central South Dakota. Whooping cranes are large (1.5 meters) birds and can have difficulty maneuvering quickly to avoid collision with powerlines and other tall structures. Powerline strikes are the most common form of mortality for fledged whooping cranes. For any projects that occur within the migration corridor, GFP recommends that Philip Wind Partners, LLC prepare a detailed contingency plan if whooping cranes are spotted within 2 miles of the Project. We further recommend Philip Wind Partners, LLC create a detailed phone/contact tree for operations staff in the event a whooping crane is spotted. These two documents should be included in any Bird and Bat/Wildlife Conservation Strategy documents.	Comment noted. Specific whooping crane information and proposed protection measures for the proposed Project are provided in the Philip Wind Energy Center Draft EA - Section - 3.8.2.2.3 - Whooping Crane, Table 2-3 - Applicant's Additional Voluntary Environmental Protection Measures, Appendix C - Whooping Crane Habitat Assessment Draft Report, Appendix K - Programmatic Biological Assessment Project Consistency Evaluation Forms, and Appendix O - UGP Wind Energy PEIS Best Management Practices. The Draft EA - Appendix L - Whooping Crane Monitoring and Contingency Plan provides the proposed Project's contingency plan. WAPA and Philip Wind Partners will continue to consult with USFWS/SDGFP on the proposed Project and potential impacts to wildlife during the development of the BBCS.
019	South Dakota Department of Game, Fish and Parks	New power lines/transmission lines are often associated with a proposed wind energy project. Powerline strikes and electrocutions are a known cause of mortality to birds. GFP recommends implementing mitigation measures described in The Avian Power Line Interaction Committee guidelines (https://www.aplic.org/), such as marking overhead lines to help prevent collisions. Additionally, GFP recommends avoiding placement of over-head powerlines adjacent to or between bodies of water (wetlands and lakes), as this could increase the risk of bird strikes, particularly for waterfowl. We further recommend Philip Wind Partners, LLC bury collection and transmission lines when possible.	Comment noted. The Philip Wind Energy Center Draft EA - Section 2.1.2 - Wind Facility provides detail of the underground collection lines and overhead generation tie transmission line, as well as the Basin Electric Transmission Line Extension. The Draft EA - Appendix O - UGP Wind Energy PEIS Best Management Practices provides detail on the proposed Project's design standards pertaining to APLIC.
019	South Dakota Department of Game, Fish and Parks	GFP typically recommends at least 2 years of postconstruction wildlife mortality monitoring. We also recommend the developer draft a Bird and Bat Conservation Strategy/Wildlife Conservation Plan to include with Project plans after wildlife surveys and Project siting is complete (or near complete).	Comment noted. WAPA and Philip Wind Partners will continue to consult with USFWS/SDGFP on the proposed Project and potential impacts to wildlife during the development of the BBCS. The UGP Wind Energy PEIS requires a minimum of 1 year of mortality monitoring; see Philip Wind Energy Center Draft EA - Appendix O - Best Management Practices.