



"VARIETY IN HUNTING AND FISHING"



GOVERNOR, Doug Burgum
DIRECTOR, Terry Steinwand
DEPUTY, Scott A. Peterson

NORTH DAKOTA GAME AND FISH DEPARTMENT

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May 24, 2019

ND Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

Subject: Ruso Wind Project
Ruso Wind Partners, LLC
Ward, McLean and McHenry Counties, North Dakota

Mr. Kahl,

The North Dakota Game and Fish Department has been in discussion with proponents of the Ruso Wind Project since 2017. We have provided comments on this project on several occasions, through letters, calls, and meetings. In early discussions, the Department expressed its concerns about the impacts wind energy development can have on native habitats and the wildlife they host. Additionally, because this project was sited within the Missouri Coteau, an incredibly resource-rich landscape with a considerable amount of native prairie and a high concentration of wetlands, it was emphasized that careful placement of turbines, roads, and other associated infrastructure would be critical for reducing impacts to the states unique, rare, and declining species.

Based on these early discussions, Southern Power worked to relocate turbines, opting to site them on previously altered land. Thanks to these efforts, impacts to important wildlife resources have been greatly reduced in comparison to the project's original design. Nonetheless, impacts will still be incurred for the life of this project (i.e. wildlife displacement in native habitat adjacent to the turbines).

In our review and analysis of impacts to wildlife, the Department quantifies both habitat loss and displacement associated with wind energy development. To do this, we are using the best available science conducted in North Dakota on avoidance and displacement due to wind development: Loesch et al. 2013 and Shaffer and Buhl 2016. Loesch et al. 2013 assessed the displacement of breeding waterfowl pairs on wetlands associated with wind farms in the Prairie Pothole Region. This study found an average rate of 21% displacement by five waterfowl species within a half mile of turbines. Shaffer and Buhl 2016, used a Before-After-Control-Impact (BACI) method to evaluate grassland bird displacement associated with turbines. They found avoidance

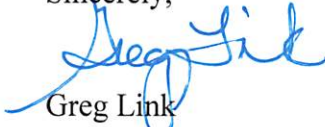
from turbines by seven grassland bird species and a 55% displacement rate by the 5th year post-construction.

By using the parameters within these studies, the impacts can be estimated for both grassland birds and breeding ducks, indicator species that reflect the use of habitats for a variety of other species. As per an email dated 5/16/2019, Southern Power has taken this information, quantified impacts, and proposed a voluntary offset package to address the following (see attachments):

- 1.17 offset acres of grasslands for direct permanent impacts to unbroken and broken grasslands
- 20.97 offset acres of grasslands for unbroken temporary permanent impacts
- 135.53 offset acres of grasslands for native grassland indirect impacts
- 196 offset acres of wetlands for displacement of 417 duck pairs

We commend Southern Power for their commitment to the stewardship of our wildlife resources and their collaborative effort throughout this process. Though this development cannot entirely avoid detrimental impacts to our state's natural resources, it is possible for a developer to responsibly address impacts which are unavoidable, and this is what Southern Power has committed to do.

Sincerely,



Greg Link
Chief, Conservation and Communications Division

Cc: Kristin Mohon, Southern Power
Scott Larson, U.S. Fish and Wildlife Service

em

Dyke, Steve R.

From: Mueller, Elisha K.
Sent: Wednesday, May 15, 2019 8:56 AM
To: Mohon, Kristin B. (SPC); Johnson, Sandra K.; Dyke, Steve R.; Link, Greg W.; Gates, Natalie; Larson, Scott; Clayton Derby
Subject: Ruso Meeting Minutes
Attachments: May 9th Meeting minutes.docx

Folks,

Attached are the meeting minutes. Please let me know if you have any comments or questions.

Elisha

Ruso Wind Project
North Dakota Game and Fish Department Meeting
May 9, 2019

Attendees:

- ✓ Kristin Mohon – Southern Power
- ✓ Clayton Derby – West Inc.
- ✓ Greg Link – North Dakota Game and Fish
- ✓ Steve Dyke – North Dakota Game and Fish
- ✓ Sandra Johnson – North Dakota Game and Fish
- ✓ Elisha Mueller – North Dakota Game and Fish
- ✓ Natalie Gates – United States Fish and Wildlife Service

General discussion:

- The last meeting on the project was in September of 2018.
- Kristin provided a summary of the project as currently proposed. Construction is scheduled to begin in the 3rd quarter of 2019 with an estimated COD in the 4th quarter of 2020.
- All environmental studies were completed last year except for the eagle study which was just completed in April.
 - 1 year of general avian use
 - 2 years of eagle surveys
 - Lek surveys- 4 found
 - Bat surveys
 - Clayton mentioned that previous reports of Northern Long Eared Bats in the state may have been false according to NDSU researchers currently looking at that issue.
- Kristin discussed proposed placement of turbines for the Ruso wind project.
 - All turbines placed outside of unbroken native grassland and wetland basins.
 - All turbines placed outside of skipper habitat.
- Natalie asked about the possibility of using some of the 'alternate' turbine locations as they would appear to have less impacts on wetland and grassland resources.
 - Kristin said they would look at possibly using some of the alternate turbine locations.
- Kristin and Clayton reviewed the Grassland impact table that was provided in the handout. Only impacts associated with roads and collection lines within unbroken prairie analyzed.
 - Steve mentioned that the table did not include any impacts associated with grasslands or wetland basins adjacent to turbines per Shaefer & Buhl and Loesch et al.

- A group discussion then ensued about how the Dept and Service have used research from Schaefer & Buhl and Loesch as the best available science with respect to gauging indirect impacts to grassland and wetland resources.

Action Items:

- Kristin will have a voluntary offset package to share with the Department on May 15th.
- Dept staff will continue to discuss impacts and voluntary offsets with proponents of the Ruso Wind project but will have their letter on the project to PSC by the end of May.
- Metrics calculated for Departments evaluation of the project for PSC:
 - Habitat loss: total acres.
 - The removal of native vegetation and top soil.
 - Grassland bird displacement: calculated in acres needed to offset displaced birds.
 - Grassland birds are used as keystone species for other species of conservation priority that rely on native grasslands for population health and persistence.
 - Per Schaefer & Buhl's study.
 - Waterfowl displacement: calculated in number of wetland basins to restore to offset displaced birds.
 - Waterfowl are used as a keystone species for other species of conservation priority that rely on wetlands for population health and persistence.
 - Per Loesch et al. study.

Dyke, Steve R.

From: Mohon, Kristin B. (SPC) <KBRODEUR@SOUTHERNCO.COM>
Sent: Friday, May 17, 2019 2:21 PM
To: Link, Greg W.
Cc: Clayton Derby; Dyke, Steve R.; Gates, Natalie; Mueller, Elisha K.; Johnson, Sandra K.; Larson, Scott
Subject: RE: Ruso Voluntary Offsets

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Greg –

Thank you for catching the typo! Yes, you are correct that the offsets should have been 196 offset acres for displacement of 417 duck pairs. Regarding the type of offset, Southern Power will be having discussions with several third party entities on the voluntary offsets and will discuss specifically native grass reconstruction, wetland restoration and protection of these resources with each of the third party entities. Additionally, Southern Power will confer about timing with the third party entities, but will commit to selecting a third party entity to pay the voluntary funds into and ensure that the dollars will be paid to the third party entity prior to project construction commences. Please let me know if you have any other questions.

Thank you,
Kristin

From: Link, Greg W. <glink@nd.gov>
Sent: Friday, May 17, 2019 1:53 PM
To: Mohon, Kristin B. (SPC) <KBRODEUR@SOUTHERNCO.COM>
Cc: Clayton Derby <cderby@west-inc.com>; Dyke, Steve R. <sdyke@nd.gov>; Gates, Natalie <natalie_gates@fws.gov>; Mueller, Elisha K. <ekmueller@nd.gov>; Johnson, Sandra K. <sajohnson@nd.gov>; Larson, Scott <scott_larson@fws.gov>
Subject: RE: Ruso Voluntary Offsets

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Kristin:

Thanks for providing us with a summary of your voluntary offsets for Ruso Wind. We think it looks good. We provide these comments for your consideration.

In your May 15 email, you estimated wetland impacts to be 98 basins or 196 acres. We agreed with that estimate as our analysis came up with a very similar number using the best available science (e.g. Loesch). However, in your May 16 correspondence, it appears you've increased the number of wetlands acres to 341.29. It's not clear to us how this figure was derived in relation to the earlier figures. We believe 196 acres is an appropriate wetland offset estimate.

We are in general agreement with the acreage of grassland offsets.

Although you have not specified the type of offsets that you plan to pursue, you may recall we did discuss and suggest, during our most recent phone conference, that native grass reconstruction and wetland restoration appear the most practical, beneficial, and accepted among the various interests of our state. We believe these restoration practices would also need to be protected for at least as long as the life of the project, generally 35-50 years.

Lastly, we would like your thoughts on timelines for initiating and completing the voluntary offsets. Our suggestion is that the offsets effort should begin when construction on the Ruso Wind project starts and be completed within 2-3 years of the project being built.

We would appreciate your thoughts on these issues.

G.Link

Greg Link
Chief, Conservation and Communications Division
North Dakota Game and Fish Department
100 N. Bismarck Expressway
Bismarck, ND 58501
Phone: 701-328-6331
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glink@nd.gov

*"To protect, conserve and enhance fish and wildlife
populations and their habitats"*

From: Mohon, Kristin B. (SPC) <KBRODEUR@SOUTHERNCO.COM>
Sent: Thursday, May 16, 2019 5:34 PM
To: Dyke, Steve R. <sdyke@nd.gov>; Gates, Natalie <natalie_gates@fws.gov>; Mueller, Elisha K. <ekmueller@nd.gov>; Johnson, Sandra K. <sajohnson@nd.gov>; Link, Greg W. <glink@nd.gov>; Larson, Scott <scott_larson@fws.gov>
Cc: Clayton Derby <cderby@west-inc.com>
Subject: Ruso Voluntary Offsets

CAUTION: This email originated from an outside source. Do not click links or open attachments unless you know they are safe.

All –

I greatly appreciate your time to discuss the Ruso project and the voluntary offsets this morning. While every effort has been made to minimize and avoid impacts to native prairie unbroken direct and indirect impacts and waterfowl displacement, Southern Power recognizes some impacts will still occur from the construction of the Ruso wind facility. Based on impacts from the project, the focus of NDGF and FWS's concerns are on native prairie unbroken direct and indirect impacts and waterfowl displacement. Southern Power is currently in the process of identifying options to voluntarily pay funds to a third party entity that restores and manages

grasslands and wetlands. Although Southern Power is still evaluating third party entities to voluntarily pay funds into in order to offset impacts, Southern Power is committed to voluntarily paying \$500,000 to offset the following:

- 1.17 offset acres for direct permanent impacts to unbroken and broken grasslands
- 20.97 offset acres for unbroken temporary permanent impacts
- 135.53 offset acres for native grassland indirect impacts
- 341.29 offset acres for displacement of 417 duck pairs

Southern Power believes that this voluntary offset package mitigates the impacts that may occur from the construction of the project. Please let me know if you have any questions.

Thank you,
Kristin



United States Department of the Interior



IN REPLY REFER TO:
RUSO WIND
PROJECT

FISH AND WILDLIFE SERVICE
South Dakota Ecological Services
420 South Garfield Avenue, Suite 400
Pierre, South Dakota 57501-5408
(605) 224-8693, southdakotafieldoffice@fws.gov

June 4, 2019

Mr. Steven Kahl
Interim Executive Secretary
North Dakota Public Service Commission
600 East Boulevard, Department 408
Bismarck, North Dakota 58505-0480

Dear Mr. Kahl:

This letter is in regard to the Ruso Wind Project, proposed by Southern Power Company (SPC), in McHenry, McLean and Ward Counties, North Dakota. We have relayed to the North Dakota Public Service Commission (NDPSC) and SPC that our primary concern regarding this project is its proposed location on the Missouri Coteau. The existence of unbroken grasslands and high number of wetland basins in this area mean it is of high value to the state's wildlife resources. Development in such locations results in relatively greater environmental impacts compared to projects in more disturbed locations (e.g. cropland dominated landscapes); we encourage companies to seek out disturbed sites for establishment of wind energy facilities. While SPC purchased the Ruso project from another developer (thus did not choose the project location), we have emphasized to SPC that future project site-selections should seek to avoid such grassland/wetland areas. Previously disturbed areas do overlap with suitable wind energy resources in the Great Plains; see Fargione et al. (2012).

Grassland nesting birds in particular are of concern with this project. Due in large part to historic and ongoing loss of habitat, among other factors, many species in this group have/continue to experience significant population declines. If this continues unchecked, such steep declines may put some of these species at risk of extinction and in need of protections under the Endangered Species Act (ESA). Our *Birds of Conservation Concern 2008* report identifies 27 species within the Prairie Potholes Region, potentially all of which may occur in the proposed Ruso project area, that currently require proactive conservation measures to stem population declines. The North Dakota Game and Fish Department (NDGFD) has identified many of those same species as Species of Conservation Priority in their *North Dakota State Wildlife Action Plan*. Placement of developments in high wildlife use areas, particularly with no actions taken to offset the impacts to wildlife, will exacerbate declines of these species and could result in future ESA listings. Wind developers can contribute to conservation of these species first and foremost by avoiding wildlife habitats, and secondarily by adequately offsetting any unavoidable impacts in these areas.

36 **PU-19-29** Filed: 6/4/2019 Pages: 3
Agency correspondence

43 **PU-19-28** Filed: 6/4/2019 Pages: 3
Agency correspondence

Although the Ruso Wind Project is sited in an area of high value to wildlife, SPC has made substantial changes to their project layout to reduce expected impacts. We have emphasized that both direct and indirect impacts to habitat and wildlife are expected as a result of this proposed project and recommended application of the best available science to calculate indirect impacts to grassland nesting birds (Shaffer and Buhl 2016, Leddy et al. 1999) and waterfowl pairs (Loesch et al. 2013). SPC has voluntarily moved the majority of proposed turbines westward into a more agriculturally dominated portion of the project area with fewer wetlands, and have indicated no turbines will be placed on unbroken prairie. SPC has also, in coordination with ourselves and the NDGFD, agreed to restore/create acreages of grasslands and wetlands in order to compensate for the Ruso Wind Project's wildlife impacts. Those acreages are:

- 1.17 grassland acres to offset direct permanent impacts to unbroken and broken grasslands
- 20.97 grassland acres to offset "temporary" impacts to unbroken grasslands (breaking up prairie can result in permanent changes)
- 135.53 grassland acres to offset displacement of nesting birds in unbroken grasslands, and
- 196 acres of wetlands to offset displacement of 417 duck pairs


We are in agreement that the above acreages are appropriate, with exception of indirect impacts to replanted grasslands. Replanted grasslands, which also provide wildlife habitat in agriculturally dominated landscapes, will incur both direct and indirect impacts (Leddy et al. 1999). To date SPC has indicated they will offset only the direct impacts to this habitat type. We continue to recommend that indirect impacts (displacement of birds) within replanted grasslands be offset, but are in alignment with NDGFD that unbroken prairie is the conservation priority.

It is our understanding that SPC is currently working with a third party conservation entity who will be able to assist SPC to ensure the above acreages of grassland and wetland habitats are established on the ground, though as of this writing, no formal agreement has been established. SPC has also indicated they will provide funds to the third party prior to Ruso construction activities.

We recognize the voluntary nature of these offsets and commend SPC for acknowledging the direct and indirect impacts the Ruso Wind Project will have on wildlife, as well as their use of the best available science to determine appropriate habitat offsets. It is our understanding that the acreages SPC committed to restoring/creating will be established and maintained for the life of the project.

If you have any questions on these comments, please contact Natalie Gates of this office at (605) 224-8693, Extension 227.

Sincerely,



Scott Larson
Field Supervisor
North and South Dakota Field Offices

cc: SPC, Kristin Mohon, Birmingham, AL
NDGF, Greg Link, Bismarck, ND

Literature Cited

Fargione, J, J. Kiesecker, M. J. Slaats, S. Olimb. 2012. Wind and wildlife in the Northern Great Plains: identifying low-impact areas for wind development.

Leddy, K. L, K. F. Higgins, D. E. Naugle. 1999. Effects of wind turbines on upland nesting birds in Conservation Reserve Program grasslands. *Wilson Bulletin* 111(1):100-104.

Loesch, C. R., J. A. Walker, R. E. Reynolds, J. S. Gleason, N. D. Niemuth, S. E. Stephens, and M. A. Erickson. 2013. Effect of wind energy development on breeding duck densities in the Prairie Pothole Region. *Journal of Wildlife Management* 77(3):587-598.

Shaffer, J. A. and D. A. Buhl. 2016. Effects of wind-energy facilities on breeding grassland bird distributions. *Conservation Biology* 30(1):59-71.