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June 22, 2017

Mr. Darrell Nitschke  
Executive Director  
NORTH DAKOTA PUBLIC SERVICE COMMISSION  
600 E. Boulevard Avenue, Dept. 408  
Bismarck, ND 58505-0480

Submitted via email to [ndpsc@nd.gov](mailto:ndpsc@nd.gov)

**Re: Glacier Ridge Wind Farm Application for Certificate of Site Compatibility, PU-16-539**

Dear Mr. Nitschke:

Following the Notice of Opportunity for Hearing issued by the Commission on May 10, 2017 ("Notice") and at the request of Commission staff, Glacier Ridge worked with certain landowners in the Project area and reached additional agreements on participation in the Project. The attachment, which includes the map of the Phase II Project Area, has been updated to include seven additional signed parcels that were added in Phase II following the issuance of the Notice as a result of these landowner discussions. The appropriate changes to Attachment I have been made in the attached version to update and correct all of the acreage and impacts with respect to Phase II. No turbine locations have been changed. Please accept this Updated Attachment I as a replacement in full for the Attachment I to the Motion to Lift the Stay with Respect to a Decision on Phase II, filed on January 26, 2017. Please do not hesitate to call or e-mail me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Anne Marie Griger'.

Anne-Marie Griger, AICP, PMP  
Permitting Manager

Enclosures

Cc: Jerry Lien  
Zachary Pelham

Attachment I (updated June 2017):

**Glacier Ridge Application for Certificate of Site Compatibility – Phase II**

The attached map highlights the proposed Phase II of the Project Area footprint. Glacier Ridge has secured executed site control agreements for all infrastructure proposed in Phase II.

Phase II Project Area Revisions: The table below lists the land sections that are fully or partially included in Phase II.

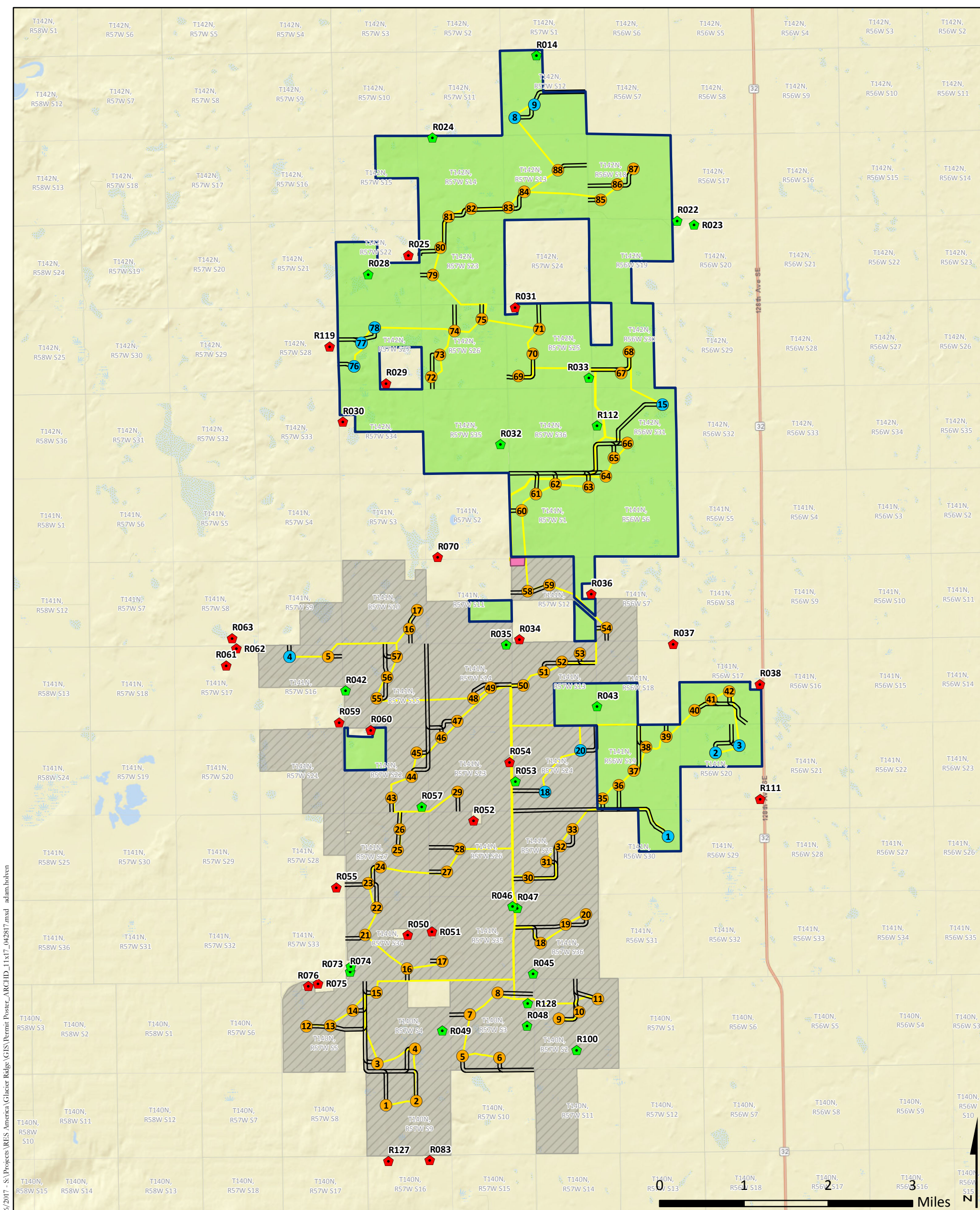
Township	Range	Sections
141 N	56 W	6, 17, 18, 19, 20, 30
141 N	57 W	1, 11, 12, 13, 22
142 N	56 W	18, 19, 30, 31
142 N	57 W	12, 13, 14, 15, 22, 23, 25, 26, 27, 34, 35, 36

Phase II includes 35 planned turbines for a total of 120.75 MW, plus 9 alternates. This includes Turbine 23 that is located in the Phase I footprint but has been added back in as part of Phase II, given the execution of a shadow flicker waiver by the residents of R055. The complete (Phase I + Phase II) Project will therefore be 87 planned turbines (300.15 MW) and 12 alternates as originally stated in the initial application.

Phase II also includes parcels around R043 that are now under contract and were included within the application Project Area maps. Additionally, Glacier Ridge proposes to correct a quirk of Project Area footprint that has long included a diagonal line for collection from turbine 54 to turbine 59. This creates for a peculiar Project Area footprint when the underlying parcels are fully under easement. The facilities planned for these parcels were not materially changed, the owners attended the public hearing, and are participating landowners. We noted this fact in the Bifurcation Motion and now seek to formally include these parcels in the Project Area as part of Phase II to allow for greater flexibility in micro-siting and a more logical Project Area footprint. Otherwise, the Project Area in Phase II has been shrunken somewhat to include almost exclusively parcels on which facilities are located. And lastly there have been no changes to turbine placement but some small adjustments to collection line locations to account for the reduced Project Area size. These modest adjustments are reflected on the attached map and are de minimis changes to the layout proposed in the original application, are of the type that would usually occur in the ordinary course of micro-siting a wind project, and are allowed and anticipated under the Project's easements. All affected landowners are participating landowners who, based on the layout included with the application and other discussions with Glacier Ridge, are already anticipating hosting these facilities.

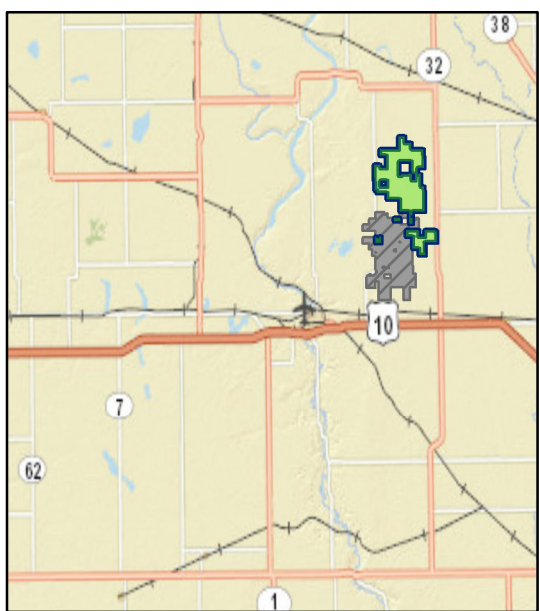
## **Related Modifications:**

- As stated above, Phase II includes 35 planned turbines for a total of 120.75 MW, plus nine alternates (total Project includes 87 turbines and 12 alternates for a total of 300.15 MW as described in the Application).
- The Project cost for Phase II is \$173 million (total Project cost is estimated to be \$375 million).
- The Phase II Project Area consists of 11,804 acres. As stated in the November 2, 2016 motion to bifurcate the Project Area, the Phase I Project Area is 13,235 acres; therefore, the total (Phase I + Phase II) Project Area is 25,039 acres.
- The estimated permanent footprint for Phase II is 35.5 acres, approximately 0.3 percent of the Phase II Project Area. This includes 7.0 acres for 35 turbines, 28.4 acres of new service roads, and negligible acreage for junction boxes and four meteorological towers. (The total estimated permanent impact of 92 acres for the complete Project from the application has not changed.)
- Up to four permanent meteorological towers will be installed in Phase II. As stated in the application, these will be self-supporting (no guy wires). The location of the meteorological towers has yet to be determined.
- The estimated permanent impact to prime farmland from construction of Phase II is approximately 29 acres (0.25 percent of the Phase II Project Area).
- There are no wind energy-specific Exclusion Areas located in Phase II.
- The Class I Literature Review for archaeological resources was completed for the complete Project construction footprint and a 1-mile buffer, and identified no previously recorded resources within the construction footprint.
- The Class I Literature Review completed for the complete Project identified no architectural resources within the anticipated construction footprint or within 2 miles of proposed Phase II turbine locations.
- The Class III Cultural Resource Inventory for archaeological resources within the anticipated construction footprint for Phase II identified four sites and three site leads. Avoidance was recommended for two of the sites, both of which are Native American artifact scatters.
- There is no change to the closest bald eagle nest (1,237 feet from the western boundary of Phase I and 1.6 miles from the nearest proposed turbine. That nest is located approximately 3.6 miles from Phase II boundary. The two other bald eagle nests observed within 10 miles of the Project Area described in the Permit Application are both located over 10 miles from the now since reduced Phase II boundary.



6/6/2017 - S:\Projects\RES America\Glacier Ridge\GIS\Permit Poster\_ARCHID\_11x17\_042817.mxd adam.bohnen

Source: Map adapted from ESRI World Street Map, Barnes County, ND; Project data provided by RES Americas. Scale 1:69,000



- Project Area**
- Phase I Project Area – Approved 12/07/16
  - Proposed Project Area - Phase II
- Proposed Project Facilities**
- Planned Turbine
  - Alternate Turbine
  - Planned Service Road
  - Planned Collection Line
  - Planned Substation and O&M Building
- Parcel Status**
- Signed
- Residences**
- Participating
  - Not Participating

# Glacier Ridge Wind Farm

Barnes County, North Dakota

