

**BEFORE THE STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

Northern Divide Wind, LLC
200 MW Northern Divide Wind Energy Center
Burke County, North Dakota
Siting Application

Case No. PU-19-376

Northern Divide Wind, LLC
345 kV Transmission Line
Burke and Mountrail Counties
Siting Application

Case No. PU-19-377

DECLARATION OF SEAN HARRINGTON

STATE OF FLORIDA)
) ss.
COUNTY OF PALM BEACH)

I, Sean Harrington, hereby declare as follows:

1. I am more than eighteen years of age, competent to testify as a witness, and make this declaration based on my personal knowledge and belief as to the facts set forth within.
2. I am a Senior Director of Construction for NextEra Energy Resources, LLC (“NextEra”), which is the indirect, upstream parent company of Northern Divide Wind, LLC (“Northern Divide Wind”), the Applicant in these proceedings. Northern Divide Wind submitted its Applications for the Northern Divide Wind Energy Center (“Wind Project”) and the associated approximately 41-mile, 345 kV transmission line (“Transmission Project”) in Commission Case Nos. PU-19-376 and PU-19-377, respectively (collectively herein, “Projects”).
3. I am submitting this Declaration in order to provide the Commission with additional information in response to the hearing in this proceeding, which was held on April 17, 2020, and in response to various topics raised in public comments filed in these proceedings.

I. Turbine Braking Speed

4. As described in the Wind Project Application, the Wind Project will consist of up to 74 wind turbines. Northern Divide Wind will use General Electric (“GE”) 2.72 MW and 2.32 MW turbines. The wind speeds at which these turbines will brake depend upon the amount of time at which the winds are sustained. In general, the turbines will brake if winds are sustained at an average of: 32 m/s (71.5 mph) in a 600-second interval; 37 m/s (82.8 mph) in a 30-second interval; and 41 m/s (91.7 mph) in a 3-second interval.¹

II. Erosion Control

5. Certain comments submitted following the April 17, 2020 hearing related to concerns regarding erosion and water runoff during and after construction.² For the reasons discussed herein, the Projects are not anticipated to adversely impact drainages.
6. Northern Divide Wind has engineered and designed the Wind Project and Transmission Project to minimize and prevent erosion, contamination of surface waters, and impacts to surface drainage and ground water flow patterns. During design of the Projects, we evaluated natural drainage flows and slopes to ensure that drainages are not impacted and that natural runoff is not diverted by the Projects.
7. As described in the Wind Project and Transmission Project Applications, during construction, Northern Divide Wind will utilize a storm water pollution prevention plan (SWPPP) to mitigate disturbed soils and prevent erosion and contamination of surface waters. Exhibit No. 1 (Wind Project Application) at page 5-18; Exhibit No. 2 (Transmission Project Application) at pages 4-3 and 5-17. An SWPPP is a site-specific, dynamic, and adaptive document that identifies the activities and conditions at the site that could cause water pollution and soil erosion and details the steps to prevent the discharge of any unpermitted pollution into storm water (including sediment from soil erosion). The SWPPP will be in compliance with applicable standards and laws regarding storm water erosion control.

¹ Northern Divide Wind notes that the shadow flicker assessment provided with its Wind Project Application stated that the wind turbines are designed to operate in wind speeds of up to 20 m/s (45 mph). See PU-19-376, Exhibit No. 1 (Wind Project Application, Exhibit B.4, Shadow Flicker Assessment, page 1). This statement should have been updated to include the braking speeds identified here; however, Northern Divide Wind confirms that braking speeds are not part of the shadow flicker model inputs and were included for informational purposes only in the report. The shadow flicker model results are unchanged by this update.

² See PU-19-376, Docket No. 71 (Comments of Patrick M. Ely).

8. Northern Divide Wind will be responsible for compliance and implementation of the SWPPP during construction, and will maintain appropriate water and soil conservation practices during construction through the implementation of best management practices (BMPs). These practices include silt fencing, temporary reseeding, permanent reseeding, mulching, filter strips, erosion blankets, grassed water ways and sod stabilization, and separation of topsoil and subsoil. Exhibit No. 1 (Wind Project Application) at pages 5-18 and 5-19; Exhibit No. 2 (Transmission Project Application) at pages 5-17 and 5-18.
9. During construction, Northern Divide Wind will regularly inspect all BMPs to ensure proper placement and functionality in compliance with the SWPPP, and will document, record, and maintain all documentation relating to the SWPPP. Northern Divide Wind also will monitor site conditions during construction and identify areas of extreme runoff or abnormal erosion and, as appropriate, recommend additional BMPs be installed, which could include the installation of culverts, rip-rap (rock foundation used for stabilization), drainage routes and ditches in areas that are subject to severe or abnormal erosion, straw bales, straw wattles, silt fencing, water bars, sediment traps, and/or velocity dampers. Northern Divide Wind will update the SWPPP accordingly to show the as-installed locations of any additional BMPs that are implemented. Following construction, Northern Divide Wind will ensure that all BMPs are removed consistent with the SWPPP.
10. As an example, where agricultural areas implement the use of “terraces” for water management, Northern Divide Wind will integrate construction efforts to minimize the impacts of roadways and/or storm water management on existing terraces. This may include the installation of culverts, adjusting of roadway grade, redirecting of existing site storm water management techniques, removal and replacement of existing weirs, or regrading terraces. During restoration and reclamation efforts, Northern Divide Wind will restore the condition of existing terraces to ensure post-construction terrace functionality remains consistent with pre-construction terrace functionality.

III. Project Roads

11. As part of the construction process, Northern Divide Wind’s EPC contractors will construct new turbine access roads or improve existing roads along turbine strings or arrays, in order to transport turbine components, equipment, construction material, and construction labor to the site. These roads will be sited in consultation with local landowners and completed in accordance with local building requirements, where these roads intersect with public roads. Northern Divide Wind also will enter into Road Use and Maintenance Agreements with Burke County, Mountrail County, and associated townships prior to construction to set forth an understanding of the use of roads during construction and operation of the Projects.

12. Turbine access roads will be located to facilitate both construction and continued operation and maintenance. All roads will include appropriate drainage and culverts while still allowing for the crossing of farm equipment. The roads will be covered with road base designed to allow passage under inclement weather conditions. The roads will consist of graded dirt and will be covered with an aggregate surface. Once construction has been completed, the roads will be re-graded, filled, and dressed as needed.

I declare, under penalty of perjury under the law of North Dakota, the foregoing is true and correct.

Signed on the 10 day of May, 2020, at County of Palm Beach, Florida, United States of America.

By: _____



Sean Harrington
Senior Director of Construction
NextEra Energy Resources, LLC