

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Langdon Wind, LLC  
Langdon Wind Energy Center - Cavalier County  
Siting Exclusion Certification**

**PU-07-026  
PU-07-722  
PU-08-159**

**CERTIFICATION RELATING TO N.D.C.C. § 49-22-03(3)(a)**

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

Pursuant to N.D.C.C. § 49-22-03(3)(a), the undersigned, John Di Donato, Vice President Development & Origination, a representative of Langdon Wind, LLC (“Langdon Wind”), with the authority to bind Langdon Wind to the following, hereby certifies as follows:

1. On May 31, 2007, in Case No. PU-07-026, the North Dakota Public Service Commission (“Commission”) issued Certificate of Site Compatibility No. 6 to Langdon Wind for the construction and operation of the Langdon Wind Energy Center (“LWEC”) consisting of 106 wind turbines capable of producing up to 159 megawatts (“MW”) located in Cavalier County, North Dakota.
2. As found in Finding of Fact No. 13 in the Order issued in PU-07-026, the Commission found that Otter Tail Corporation d/b/a Otter Tail Power Company (“Otter Tail”) then had an option to own 40.5 MW of the LWEC.<sup>1</sup>
3. On May 7, 2008, in Case No. PU-07-722, the Commission issued First Amended Certificate of Site Compatibility No. 6 authorizing the expansion of the LWEC to include an additional 40.5 MW consisting of up to 27 turbines. *See* PU-07-722 Docket No. 26 (Order authorizing the increase of the LWEC from 159 MW to 199.5 MW).
4. On July 16, 2008, in Case No. PU-08-159, the Commission issued Second Amended Certificate of Site Compatibility No. 6 to Langdon Wind authorizing the transfer of ownership of a 40.5 MW portion of the 199.5 MW facility from Langdon Wind to Otter Tail. Also on July 16, 2008, in Case No. PU-08-159, the Commission simultaneously

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<sup>1</sup> In November 2007, in Case No. PU-07-607, Otter Tail exercised its ownership option for its 40.5 MW portion of the LWEC, and was issued Certificate of Public Convenience and Necessity No. 5336 for its 40.5 MW portion of the LWEC.

issued Certificate of Site Compatibility No. 8 to Otter Tail to acquire the transfer of the 40.5 MW portion.<sup>2</sup>

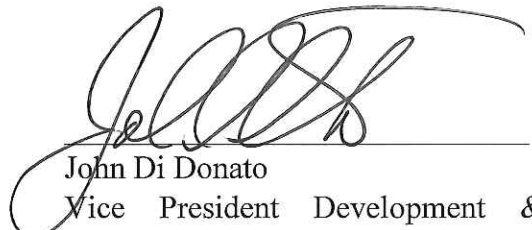
5. Langdon Wind is currently authorized to construct and operate a total of 106 turbines capable of generating 159 MW (79 turbines with a generating capacity of 118.5 MW as authorized PU-07-026 and 27 turbines with a generating capacity of 40.5 MW as authorized in PU-07-722).
6. Pursuant to N.D.C.C. § 49-22-03(3)(a), Langdon Wind proposes to improve the LWEC by extending the life of Langdon Wind's older legacy turbines by at least ten years (the "Project"). *See* Finding of Fact No. 32 in PU-07-722 Order ("Retrofitting the turbines and power systems with upgrades based on new technology may allow the wind farm to produce efficiently and successfully for many more years."). The improvements are proper under, and within the scope of, N.D.C.C. § 49-22-03(3)(a). Attached to this Certification as Exhibit 1 and incorporated herein is a summary of the Project ("Project Summary").
7. The Project will include the addition of new gearboxes and rotors (i.e. blade assembly), which will improve turbine performance, operations, and maintenance. The Project will have minimal surface and operational impacts, as existing turbine locations, towers, nacelles, roads, electric collection systems, and substations will remain unchanged. The Project will utilize existing roads and previously used temporary turning radii and laydown yards during the construction process. Temporarily disturbed areas, such as the previously disturbed turning radii and laydown yard, will be returned to existing land uses.
8. The Project will consist of upgrades to improve the 106 1.5 MW turbines which will increase the nameplate capacity of the existing turbines from 1.5 MW to 1.62 MW. Thus, the nameplate generation of the 106 turbines owned by Langdon Wind will increase from 159 MW to 171.72 MW. *See* N.D.C.C. §§ 49-22-03(3)(a)(3)(c)-(d), 49-22-03(3)(a)(4)(b)(3)-(4) (certification procedure permitting activities to improve and to increase the capacity of electric energy conversion facilities). However, per existing commercial agreements, Langdon Wind will cap the output of the LWEC to 159 MW.
9. The rotor hub height of the turbines will remain 80 meters; however, the installation of new blades will increase the rotor diameter from 77 meters to 91 meters. Although the rotor diameter will increase, all turbines will remain at least 1,400 feet from occupied residences in compliance with prior Commission Orders.

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<sup>2</sup> The rights and obligations transferred to Otter Tail coincide with the geographic portion of the LWEC for which the Commission issued a Certificate of Public Convenience and Necessity to Otter Tail in PU-07-607. *See* PU-08-159 Docket No. 12, Order.

10. The Project was evaluated for potential impacts to known Exclusion and Avoidance Areas set forth in N. D. Admin. Code § 69-06-08-01.
11. As a part of this analysis, Langdon Wind conducted a new sound level assessment and shadow flicker analysis at inhabited residences and community buildings (collectively, “receptor”). The predicted worst-case sound levels from the Project are anticipated to be 49 dBA within 100 feet of a participating landowner receptor, which is below the Commission’s required 50 dBA standard. Based on the shadow flicker analysis, the predicted worst-case shadow flicker is expected to be below the Commission’s accepted threshold of 30hr/year at all receptor locations. Therefore, the Project meets the Commission’s thresholds with respect to sound and shadow flicker impacts at all modeled receptors. *See* Project Summary Pg. 5; Exhibit 1, Appendix 1, Sound Level Assessment Report; Exhibit 1, Appendix 2, Shadow Flicker Analysis.
12. Langdon Wind completed a Class I and Class II/III Cultural Resource Survey for areas that may be potentially impacted by the Project, and submitted the cultural resource findings to the State Historical Society of North Dakota (“NDSHPO”) for review on May 18, 2018. Results of the surveys demonstrate there will be no new impacts or temporary impacts to cultural resources. Langdon Wind will file the NDSHPO’s concurrence regarding the Project as soon as it is received.
13. There will be no new impacts or temporary impacts to wetlands or waterbodies resulting from activities associated with the Project.
14. In April 2015, following the Commission’s siting approval of the LWEC, the United States Fish and Wildlife Service listed the northern long-eared bat (*Myotis septentrionalis*) as threatened under the Endangered Species Act. The LWEC is within the geographic range of the northern long-eared bat, but does not contain northern long-eared bat critical habitat. Langdon Wind assessed the potential for northern long-eared bat to occur in the LWEC since it was not addressed in prior wildlife assessments. The expected use and occurrence of northern long-eared bats is low due to the lack of suitable habitat within and in the vicinity of the LWEC. Furthermore, since operations began, no northern long-eared bats have been reported through the Wildlife Resource Reporting System (“WRRS”). Langdon Wind will continue to implement the WRRS as described in the Commission Orders previously issued for the LWEC.
15. Langdon Wind is in the process of notifying surrounding landowners of the Project. No additional landowner easements were required to complete the Project. Langdon Wind is currently negotiating landowner agreements for temporary turning radii, which will be returned to existing land uses upon completion.
16. Langdon Wind has communicated with Cavalier County and all existing permits and road use agreements remain applicable.

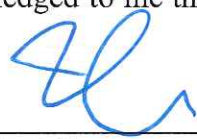
17. Langdon Wind will obtain all necessary permits from the North Dakota Water Commission prior to engaging in construction activity for which permits may be required.
18. Project construction will occur wholly within the geographic location for which Langdon Wind previously obtained a site certificate. *See* N.D.C.C. §§ 49-22-03(3)(a)(1), 49-22-03(3)(a)(1)(a).
19. Construction of the Project is for the same type of facilities as approved in the Commission's Order issuing Certificate of Site Compatibility No. 6, as amended. *See* N.D.C.C. § 49-22-03(3)(a)(1).
20. Activities associated with the Project will not affect any known exclusion or avoidance areas. *See* N.D.C.C. §§ 49-22-03(3)(a)(2), 49-22-03(3)(a)(4)(a).
21. Langdon Wind will continue to comply with all applicable conditions and protections in the siting laws and rules and Commission Orders previously issued for the LWEC. *See* N.D.C.C. § 49-22-03(3)(a)(4)(c).
22. Langdon Wind anticipates initiating construction on the Project by September 2018.

  
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 John Di Donato  
 Vice President Development &  
 Origination  
 Langdon Wind, LLC

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

On this 25 day of May, 2018, before me personally appeared John Di Donato, known to me to be the Vice President Development & Origination of the limited liability company that is described in and that executed the within instrument, and acknowledged to me that such limited liability company executed the same.



  
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 Notary Public