



layout, which will remain as depicted in the as-built maps Otter Tail is filing with the Commission concurrently with this Certification.<sup>1</sup>

5. Due to the increased blade length, the overall turbine height will increase from 118.5 meters (388.8 feet) to 128.5 meters (421.6 feet).

6. Otter Tail plans to use the existing turbine foundations (with reinforcement, if needed), collection and communications systems, permanent access roads, and Facility substation. Other associated facilities will remain unchanged.

7. During installation of the upgraded equipment, existing access roads will be temporarily widened to accommodate delivery and staging of components and equipment. Temporary crane paths may also be needed to facilitate equipment removal and installation. A temporary laydown yard will also be used during installation. All activities are expected to occur within areas previously disturbed by initial construction.

8. The Upgrade Project activities are wholly within the site designated by the Commission for the Facility in its May 31, 2007 Findings of Fact, Conclusions of Law and Order (Case No. PU-07-26) (May 2007 Order), and are to improve the same type of facility for which a Certificate of Site Compatibility was issued. *See* N.D.C.C. §§ 49-22-03(3)(a)(1), (3) and (4)(b).

9. Otter Tail has conducted an environmental and regulatory compliance analysis for the Upgrade Project, and an associated report prepared by its environmental consultant, Atwell, LLC (Atwell), is provided as **Exhibit A**. As set forth in **Exhibit A**:

a. **Cultural Resources.** Otter Tail coordinated with the State Historical Society of North Dakota (SHSND) regarding the Upgrade Project. The Upgrade Project

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<sup>1</sup> In preparing this Certification, it was determined that as-builts covering the entirety of the Facility had not previously been filed with the Commission. Therefore, a set of Facility as-builts is being filed in this docket, as well as in Case No. PU-08-159.

activities will occur primarily within areas previously surveyed for cultural resources, and all activities will occur within areas previously disturbed by initial construction. As a result, the SHSND has determined that additional cultural resource surveys are not necessary, except to the extent crane paths are located in previously unsurveyed areas. If any crane paths are located outside of areas previously surveyed for cultural resources, Otter Tail will complete cultural resource field surveys and will avoid any resources identified that are eligible or unevaluated for listing on the National Register of Historic Places (NRHP). Therefore, no cultural resources will be affected by the Upgrade Project.

b. **Architectural Resources.** Although not recommended at the time the Facility was originally permitted and constructed, the SHSND's current practice is to recommend completion of an architectural history survey within the vicinity of wind energy generation facilities to identify architectural resources potentially eligible for NRHP-listing and to evaluate potential impact to those resources. As a result, Otter Tail is in the process of completing an architectural history survey. Since the Upgrade Project involves technology upgrades to existing turbines, it is not anticipated that the limited modifications will adversely affect architectural history resources. However, in the event of an adverse impact, Otter Tail will coordinate with SHSND to identify appropriate mitigation.

c. **Wetlands.** Wetlands and waterbodies have been identified within the Upgrade Project area. No permanent wetland impacts will occur as a result of upgrade activities.

d. **Sound.** At Atwell's direction, Epsilon Associates, Inc. (Epsilon) completed a sound analysis for the Facility with the proposed upgraded technology. At

the time the Facility was permitted, the Commission did not have a sound standard for wind energy facilities. Finding of Fact No. 31 in the Commission's May 2007 Order states that "average noise levels at such [occupied] residences will not exceed the generally accepted 50 dB standard." The Commission's current sound level requirement is 45 dBA or less within 100 feet of occupied residences and community buildings. With the upgraded equipment, sound levels were modeled at between 46 and 49 dBA within 100 feet of six occupied residences, while sound levels were at or below 45 dBA within 100 feet of the remaining residences (no community buildings are present). With respect to the six residences with modeled sound levels above the Commission's current sound standard, Otter Tail will either obtain a waiver from the owner(s) of each residence or install noise-reduction technology to comply with the Commission's current sound requirement.

e. **Shadow Flicker.** Epsilon completed a shadow flicker assessment for the Facility with the proposed upgraded technology. The Commission does not have a shadow flicker standard, and shadow flicker was not addressed in the Commission's May 2007 Order. The shadow flicker assessment demonstrates that shadow flicker levels are not anticipated to exceed 30 hours per year at any occupied residence.

f. **Exclusion and Avoidance Areas.** Otter Tail has analyzed the Upgrade Project's compliance with the Commission's current exclusion area and avoidance area criteria. The Facility will comply with all current exclusion area and avoidance area criteria, and construction activities associated with the Upgrade Project will not affect any known exclusion or avoidance areas within the designated site. *See* N.D.C.C. §§ 49-22-03(3)(a)(2) and (4)(a).

10. The Facility will continue to comply with all requirements set forth in the Commission's Orders regarding the Facility, including applicable laws and rules designating the site. See N.D.C.C. §§ 49-22-03(3)(a)(1) and (4)(c).

FURTHER AFFIANT SAYETH NOT.

  
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Bradley E. Tollerson

Subscribed and sworn to before me  
this 3<sup>rd</sup> day of March 2023.

  
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Notary Public



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