

APPENDIX A TO AFFIDAVIT OF BRADLEY E. TOLLERSON

Memorandum Regarding Merricourt Energy Conversion Facility and Site Plan Modifications

Case Numbers PU-08-932; PU-19-144

I. Background.

The Merricourt Wind Project is a planned 150 MW wind energy generation facility located in McIntosh and Dickey Counties that will include 75 2.0 MW Vestas V110 wind turbine generators and associated infrastructure (the “Merricourt Project”). On June 8, 2011, the Commission adopted Findings of Fact, Conclusions of Law and Order issuing Certificate of Site Compatibility No. 23, as amended on May 27, 2015 and as amended again on November 16, 2017 issuing the Second Amended Certificate of Site Compatibility No. 23 (the “Certificate”). On June 26, 2019, the Commission approved the joint application of EDF Renewables Development, Inc. (“EDF”) and Otter Tail Power Company (“OTP”) to transfer the Second Amended Certificate of Site Compatibility No. 23 from EDF to OTP and issued the First Reissued Second Amended Certificate of Site Compatibility No. 23 to OTP.

On July 16, 2019, OTP acquired the Merricourt Project from EDF and its affiliates, including EDF-RE US Development, LLC (“EDF-USD”). On July 31, 2019 and following OTP’s acquisition of the Merricourt Project, OTP filed a Certification describing layout modifications to the Project and attaching the relevant additional survey work and analysis as required by Certification Provision No. 38(A) to the Certificate (the “2019 Certification”). Shortly thereafter, OTP and EDF entered the construction phase with EDF serving as contractor to OTP.

On October 2, 2019, a letter was filed notifying the Commission of two unintended disturbances of cultural sites within the Project area. Several corrective actions were taken to ensure avoidance of such an event occurring again, one of which was conducting additional cultural survey work. On November 5, 2019, a second letter was filed notifying the Commission of newly identified cultural sites discovered as a result of the additional survey work. Since that time and as described in an additional update filing with the Commission on January 29, 2020, OTP and EDF have been analyzing the impact of these discoveries to the micrositeing for the Project.

In order to ensure sufficient distance from the disturbed sites and all newly identified cultural sites, OTP and EDF have made the changes described herein to the Project layout. In accordance with Certification Provision No. 38(A), OTP is providing this memorandum to describe the changes that have been made to the energy conversion facility and site plan since the 2019 Certification.

II. Description of Modifications.

51 PU-19-144 Filed: 4/15/2020 Pages: 3
Appendix A to Affidavit of Brandley E. Tollerson

259 PU-08-932 Filed: 4/15/2020 Pages: 3
Appendix A to Affidavit of Brandley E. Tollerson

EDF has determined that a few layout modifications are necessary to ensure safe distance from all cultural sites in the Project area. While a more complete list is included in Attachment 1 – Summary of Layout Modifications, the key changes include shifting 6 turbines between 163 and 600 feet to ensure at least 50 foot setbacks from all cultural sites, and moving some collection lines and roads to accommodate these changes or to otherwise ensure compliance with the Certificate and/or other internal best management practices. The modifications are visually depicted in the Updated Site Plan included as Attachment 2.

The following certification and supporting documentation are provided in accordance with Certification Provision 38(A):

Attachment 1 - Summary of Updated Site Plan Modifications

Attachment 2 - Updated Site Plan

Attachment 3 - Revised Acoustic and Shadow Flicker Assessments

Attachment 4 - Archaeological and Cultural Addendum Survey Report Summary and SHPO Concurrence

Attachment 5 - Archaeological and Cultural Addendum Survey Report Summary and SHPO Concurrence

Attachment 6 - Update to March 2017 Aquatic Resources Delineation Report and July 2019 Addendum

III. Supporting Analysis.

1. **Summary (Attachment 1).** The summary includes a detailed list of the changes to the site plan, most of which are moves to 6 turbines to create sufficient distance from cultural sites and the collection system to accommodate these changes.

2. **Updated Site Plan (Attachment 2).** The site plan modifications are depicted in the Updated Site Plan attached hereto. Maps and GIS shapefiles of the site modifications consistent with Provision No. 38(A)(2) will be separately filed by KLJ.

3. **Revised Acoustic and Shadow Flicker Assessments (Attachment 3).** The updated acoustic results continue to show that all receptors remain under 50dBA and the updated shadow flicker analysis continues to show that all receptors remain under 30 shadow flicker hours per year. The highest modeled noise level for any occupied residence is now 49.6 dBA (up 0.1 dBA from 49.5 dBA in the analysis included in the 2019 Certification filing). The highest modeled shadow flicker hours per year for any occupied residence is currently 18.9 hours per year, down from 19.1 hours per year for that particular residence and down from 25.1 hours per year (a different residence which is now at 17.4 hours per year and per the attached revised analysis) as the highest modeled shadow flicker for any occupied residence in the analysis included in the 2019 Certification filing.

4. **2019 Archaeological and Cultural Addendum Survey Report Summary (Attachment 4).** EDF has long contracted KLJ to monitor construction activities related to the Project. As described earlier and in an attempt to greatly reduce the likelihood of any further

disturbance to known or unknown cultural sites, EDF instructed KLJ to conduct additional cultural resource survey work of all remaining turbines, access roads, and collection line corridors. This survey work included locations with no previously known sites and agricultural fields.

The updated inventory consisted of tight intervals of 15-meters or less, especially in areas of thick vegetation where transects were reduced to 5-meters. KLJ notes that several locations had been cattle grazed since the original inventories in 2009, 2013, & 2016. During the inventory, 18 new sites comprising 30 new features (cairns or stone circles) were recorded.

As a result of the new findings, EDF and OTP made adjustments to the locations of turbines 7, 20, 51, 52, and 53 to ensure that all cultural resources were given a 50-foot buffer/set back, with no construction to occur within these buffer zones. In addition, the original location for turbine 56 (which was proximate to the disturbed sites) was removed from consideration and a new location approximately 180 meters to the east-southeast selected for turbine 56. The new turbine and access road locations have been inventoried by KLJ archaeologists, with no cultural features or materials encountered. The KLJ 2019 Report is attached to this Memorandum as Attachment 4, Part A and the SHPO Concurrence for the same as Attachment 4, Part B.

5. Cultural Review Re Collection Line Re-Route Described in 2019 Certification (Attachment 5)

Additionally and in the prior 2019 Certification, it was noted that EDF planned to use a directional bore for a collection line crossing the cultural sites as depicted in Figure 21 of the cultural report attached to the 2019 Certification – pending SHPO’s concurrence for the same. It was also stated therein that if SHPO did not concur with the directional bore as an avoidance approach for the sites, the area to the east of the sites was clear, and the collection line could be rerouted around the sites. OTP and EDF have rerouted plans for the collection line around the sites located in Figure 21 as described in the KLJ report attached hereto as Attachment 5, Part A and with the SHPO concurrence for the same attached hereto as Attachment 5, Part B.

6. KLJ Wetland Memorandum: Update to March 2017 Aquatic Resources Delineation Report and July 2019 Memorandum (Attachment 6).

EDF commissioned KLJ to conduct supplemental wetland delineation analysis in light of the proposed layout modifications. The desktop aquatic resource delineation analyzed 7 additional areas for wetlands that were previously not surveyed totaling less than 1 acre in the aggregate. No wetland signatures were identified within the study area and no aquatic resources delineated. KLJ’s memorandum of the same is dated February 5, 2020 and attached hereto as Attachment 6.

IV. Conclusion.

The Project site plan modifications are consistent with the Commission’s Order and will not otherwise affect any known exclusion or avoidance areas.