



November 2, 2021

**VIA ELECTRONIC FILING: NDPSC@ND.gov**

Mr. Steve Kahl  
Director of Administration  
North Dakota Public Service Commission  
State Capitol Building  
600 East Boulevard Avenue, No. 408  
Bismarck, North Dakota 58505-0480

**RE: Case No. PU-05-47 – Request by Rugby Wind LLC for Extension of Light Mitigation Deadline for the Rugby Wind Farm.**

Dear Mr. Kahl:

Rugby Wind LLC respectfully submits the attached extension application for the Rugby Wind Farm, located in Pierce County, North Dakota. Based on consultation with Commission Staff, our understanding is that electronic submission to the address above will satisfy the filing requirements as an accommodation for Covid-19 disruption to normal business practices. I make this filing on behalf of the applicant, Rugby Wind LLC. You can reach me at the following address:

Peter Landoni  
Asset Manager  
1125 NW Couch Street  
Portland, Oregon 97209  
[Peter.Landoni@avangrid.com](mailto:Peter.Landoni@avangrid.com)  
503-796-7162

Please feel free to have Public Service Commission Staff contact me with any questions.

Sincerely,

   /s/ Peter Landoni

Peter Landoni

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

In the Matter of the Application of  
Rugby Wind LLC for Extension of Light  
Mitigation Deadline for the Rugby Wind  
Farm

Case No. PU-05-47 – Application for  
Extension of Time

**I. Summary of Application for Extension of Time**

Rugby Wind LLC (“Rugby” or the “Applicant”) owns and operates the 149.1-Megawatt (MW) Rugby Wind Farm located in Pierce County, North Dakota. Rugby is comprised of 71 Suzlon S88 2.1 MW turbines and started commercial operation on December 23, 2009. Rugby was issued a certificate of site compatibility prior to June 5, 2016 and per N.D.C.C. Chapter 69-06-01 it must install functioning light-mitigation technology by December 31, 2021.

On March 22, 2021, Rugby Wind Farm submitted an application for an extension for the purpose of considering alternate technology that was not yet approved due to a delay in FAA’s review of the system for aviation safety. On April 14, 2021, the Commission held a hearing on that request. On May 7, 2021 (May 17, 2021 received via email) staff posted its recommendation in the docket that the request be denied. In response to the staff recommendation, Rugby Wind Farm submitted a letter to the Commission, dated May 27, 2021, expressing disappointment in the recommendation, but a commitment to meeting statutory requirements and shared a change in plans to “install ADLS at the Rugby Wind Farm in lieu of waiting further for FAA approval of the LIDS technology.” Subsequently, the extension request was denied by the Commission on June 9, 2021.

Installation of the light mitigation system requires construction of a radar tower. Rugby has obtained local zoning approval for the tower, ordered all equipment, and is prepared to install the tower as soon as the Federal Communications Commission (FCC) review process is complete. The FCC process is expected to be complete in mid-November, when installation will commence. The Federal Aviation Administration (FAA) has approved the Aircraft Detection Lighting System (ADLS) for the Rugby Wind Farm and issued determinations for marking and lighting for structures.

Some of the equipment, though ordered, is coming from overseas and may not be delivered until December. Because of the uncertainty of obtaining the equipment from its European manufacturer, we wanted to inform the Commission that although Rugby has been working diligently to meet the deadline, we can foresee that a potential for delay exists, and that the delay would not allow sufficient time to prepare a petition for an extension.

Accordingly, Rugby submits this application pursuant to N.D.C.C. § 69-06-11-02 to provide the Commission with technical and economic considerations in support of an extension of time to comply with the light mitigation requirement. As discussed in more detail below, Rugby asks the Commission to extend the December 31, 2021 deadline for Rugby to May 31, 2022, with the proviso that Rugby will install the equipment at the earliest possible date, subject only to equipment delivery and weather delays.

## **II. The Applicant**

The Applicant, Rugby Wind LLC is an Oregon limited liability company and authorized to do business in North Dakota. The Rugby Wind Farm supports its North Dakota community financially while generating clean, affordable electricity. Rugby is wholly owned by Avangrid Renewables, LLC, one of the leading providers of clean, renewable power in the U.S. with more than 7,000 MW of owned and controlled wind and solar power facilities. The address for the Applicant and its parent company is 1125 NW Couch Street, Portland, Oregon, 97209.

The North Dakota Public Utility Commission issued a Certificate of Site Compatibility (“CSC”) (Certificate No. 5) for the 149-MW Rugby Wind Farm on October 3, 2005 and re-issued the CSC on August 27, 2008. Rugby completed construction of the turbines and associated infrastructure, including FAA-approved lighting, in December 2009. The applicant has not received any complaints about the lighting of the Rugby Wind Farm since it commenced operation.

## **III. Lighting Mitigation Implementation Plan**

Rugby has expedited our permitting, procurement, engineering and construction processes in order to meet the December 31, 2021 deadline. Rugby acquired lighting fixtures, a lattice tower, power and fiber cabling, Pierce County zoning approval, FAA approval, and engineering and installation services.

Please see Exhibit A for more information on the steps taken to date to accomplish the objective of meeting the installation deadline. Attached as Exhibit B is a copy of the zoning approval. Rugby met with and briefed Commission Staff of these efforts on October 12, 2021, and now provides the attached updated information to the Commission for its records.

Currently at the Rugby Wind Farm, 41 turbines have FAA lights installed. Based on FAA requirements the estimated number of turbines with ADLS compatible FAA lights would increase to 58. An unexpected impact occurred when the FAA concluded that all 71 turbines in the project, the met tower, and the radar tower would all need ADLS FAA lights. We worked with our contractor (Capitol Airspace Group) and the FAA on this and the FAA agreed to update its determination, requiring 58 aviation lights. Exhibit C is the summary of FAA determinations of which turbines need to be lit and approval of ADLS for Rugby.

Despite the accelerated planning and implementation processes underway, there are two time challenges we are seeking to overcome: the FCC National Environmental Policy Act (NEPA) review and global shipping and supply chain issues.

The FCC required review of the radar tower under NEPA and National Historic Preservation Act (NHPA). The North Dakota State Historical Society has reviewed the proposed action for the ADLS tower and determined “No Historic Properties Affected” (October 22, 2021). This letter is attached as Exhibit D. The federal NEPA process also requires tribal consultation and is anticipated to be complete on November 12, 2021. To date, we have not received any responses from tribes indicating a potential concern or potential effect to tribal resources. The FCC review is the gating item for commencing ground disturbing work. The installation contractor is staged to commence construction on the tower immediately following the conclusion of the NEPA process.



## Exhibit A

### Summary of Rugby ADLS Process

#### Permitting:

1. Department of Defense Military Aviation and Installation Assurance Clearinghouse informally reviewed ADLS for the Rugby Wind Farm and determined that ADLS radar will have minimal impact on military operations conducted in the area, including military training routes located within the region of the Rugby Wind Farm 1/2021.
2. Pierce County Conditional Use Permit (CUP) request for ADLS tower
  - i. Started application preparation in June 2021 and submitted application 7/23/21
  - ii. Pierce County Planning and Zoning Board meeting on 8/19/21 and Pierce County Board of Commissioners hearing 9/7/21
  - iii. Received CUP on 9/7/21
3. Terma conducted an updated coverage analysis for the ADLS tower location and provided results - 8/13/21
4. FAA request for ADLS at Rugby Wind Farm, new ADLS Tower, and updated marking and lighting (the Terma coverage analysis was necessary for this submission) - submitted 8/26/21, received final determinations 9/30/21, 10/13/21, and 10/19/21. Attached Exhibit C.
5. FCC review process
  - i. Tower Construction Notification System (TCNS) submitted 7/29/21, number 235893
  - ii. FCC sent notice to tribes on 8/5/21
  - iii. FCC Form 620 - Section 106, tribal and SHPO review packets and the coordination letters sent 9/16/21
  - iv. Initial Tribal Review Period Completion 10/24/21 (this is 36 days after submittal of the hard copy Form 620 and associated documentation).
  - v. Other Interested Party Consultation Completion - 10/24/21
  - vi. SHPO determination of "No Historic Properties Affected" – received 10/22/21
  - vii. Non-Responsive Tribal Referral Period Completion - 11/12/21
  - viii. NEPA Review Completion 11/12/21 (need tribal review period to be completed)
  - ix. Anticipate FCC review completed 11/12/21 - completion date is dependent on the receipt of clearances from tribes (i.e., no tribal resources would be adversely affected by the tower) and no other concerns from SHPO, local government, or the public.
6. FCC license for ADLS tower radio station authorization (apply after FCC NEPA completed)

#### Procurement:

1. Purchase order for SWCA, Inc to prepare Conditional Use Permit Application – 5/27/21
2. Request supplemental Capital Expenditure funding from Corporate Committee – June 2021, approved 7/5/21
3. Submit request for bids on radar system, ADLS tower, FAA lights – 5/25/21
4. Business Controls created internal Order #s – 7/15/21
5. Plant created Purchase Request for equipment – 7/27/21
6. Procured ADLS radar tower and ADLS radar - 8/27/21
7. Procured ADLS tower fencing – 9/21/21
8. Procured FAA lights compatible with ADLS system – 9/22/21

9. Procured ADLS radar tower access road and underground collection and communication system install - 9/30/21

**Landowner Lease Agreement:**

1. Parcel is part of Rugby Wind Farm Leases since 2005
2. Lease amendment for ADLS tower, access road, underground collection and communications lines – verbal discussion 9/21/21, etc. on lease status
3. Lease mailed to landowner for signature - 11/01/21

**Communications with Terma North America, Inc.**

1. Preliminary costing starting in December 2020.
2. Conducted ADLS radar coverage analysis for wind farm based on ADLS tower location in February and July 2021
3. Kick-off meeting with Terma and Avangrid - 7/21/21
4. Radar procurement - 8/27/21
5. Lights, IP Addresses, Communications – 9/28/21 & 9/30/21 (on-going)

**Exhibit B**

**Zoning Approval for ADLS Tower**

# Pierce County

## Conditional Use Permit

Date: **9/7/2021** \_\_\_\_\_

Permit # \_\_\_\_\_ 2021-13 \_\_\_\_\_

**Permit Issued to (Name)** \_Rugby Wind LLC/ SWCA Environmental Consultants \_  
**Address:** 1125 NW Couch Street, Suite 700 Portland Oregon 97209  
**Phone:** (503)796-7000

**Permit for construction of a(n):** Lattice construction ADLS Tower 100' from nearest property line.

**Location (Legal Description):** NW1/4 Sec 21-158-72

This certificate, issued on the basis of approved plans as stated on the zoning certificate application form, authorizes only the use, arrangement and construction set forth in such approved plans and applications, and no other use, arrangement or construction.


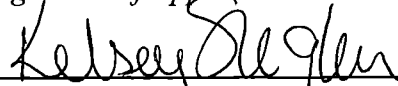
**Conditions/Local Regulations:**

1. Tower must be in compliance with all State and Federal regulatory standards.
2. Tower must be at least 750' from any occupied residence, 300' from any Road Right of Way and no closer than 100' to property line.
3. Tower may be of lattice construction.
4. Company is to provide documentation of approved ADLS technology to the County Commission, once cleared by FAA. Documentation can be sent to: Pierce County Commission; 240 2<sup>nd</sup> ST SE, Rugby, ND 58368.

Any use, arrangement or construction at variance with that authorized shall be deemed a violation of the ordinance and subject as such to penalties as described by the ordinance and/or certificate of revocation.

This notice must be posted in a conspicuous place on or near the construction site.

County Fee: \_\_\_\_\_ \$500 \_\_\_\_\_  
Paid: \_\_\_\_\_ \$500 \_\_\_\_\_  
Receipt # \_\_\_\_\_ 36265 \_\_\_\_\_

DocuSigned by:  
 10/11/2021  
ED92F90E2B0944E...  
 Signature of Applicant Jace Fabrycki  
  
 Signature of Authorizing Agent

**Exhibit C**

**FAA Determination Summary**

Rugby Wind Farm  
FAA Summary

Rugby Turbine No.	Aeronautical Study Number	Structure Name (as filed, cannot be changed)	Status	Coordinates (DMS)		Coordinates (DD)		Site Elevation (AMSL Feet)	Structure Height (AGL Feet)		As-Built Marking and Lighting	ADLS Required Marking & Lighting	ADLS Determination Date
				Latitude	Longitude	Latitude	Longitude		Proposed	Determined			
A2	2006-AGL-4320-OE	#1	Determination of Marking and Lighting	48-32-34.11N	100-2-4.52W	48.5428083	-100.0345889	1636		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
A5	2006-AGL-4323-OE	#5	Determination of Marking and Lighting	48-32-35.73N	100-1-19.66W	48.5432583	-100.0221278	1666		406	White Paint/Synchronized Red Lights	White Paint Only	10/13/2021
A7	2006-AGL-4325-OE	#9	Determination of Marking and Lighting	48-32-28.32N	100-36.75W	48.5412	-100.0102083	1656		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
E1	2006-AGL-4326-OE	#10	Determination of Marking and Lighting	48-31-16.71N	100-2-3.12W	48.5213083	-100.0342	1612		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
F2	2006-AGL-4330-OE	#16	Determination of Marking and Lighting	48-30-39.45N	100-59.43W	48.5109583	-100.0165083	1666		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
G1	2006-AGL-4332-OE	#19	Determination of Marking and Lighting	48-30-12.96N	100-1-6.49W	48.5036	-100.0184694	1618		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
G5	2006-AGL-4338-OE	#29	Determination of Marking and Lighting	48-30-18.43N	99-59-14.74W	48.5051194	-99.9874278	1660		406	White Paint Only	White Paint Only	10/13/2021
B5	2006-AGL-4342-OE	#36	Determination of Marking and Lighting	48-31-42.92N	99-57-43.30W	48.5285889	-99.9620278	1660		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
B1	2006-AGL-4343-OE	#37	Determination of Marking and Lighting	48-31-55.34N	99-57-40.53W	48.5320389	-99.9612583	1686		406	White Paint Only	White Paint Only	10/13/2021
B4	2006-AGL-4346-OE	#40	Determination of Marking and Lighting	48-32-5.38N	99-56-52.44W	48.5348278	-99.9479	1702		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
C1	2006-AGL-4347-OE	#42	Determination of Marking and Lighting	48-31-50.77N	99-56-5.42W	48.5307694	-99.9348389	1696		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
D4	2006-AGL-4352-OE	#52	Determination of Marking and Lighting	48-31-27.66N	99-55-32.37W	48.52435	-99.9256583	1688		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
H1	2006-AGL-4354-OE	#57	Determination of Marking and Lighting	48-30-39.60N	99-56-43.11W	48.511	-99.9453083	1688		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
M5	2006-AGL-4357-OE	#65	Determination of Marking and Lighting	48-30-30.31N	99-53-20.90W	48.5084194	-99.8891389	1700		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
M4	2006-AGL-4358-OE	#66	Determination of Marking and Lighting	48-30-21.20N	99-53-27.96W	48.5058889	-99.8911	1698		406	White Paint Only	White Paint Only	10/13/2021
M3	2006-AGL-4359-OE	#67	Determination of Marking and Lighting	48-30-11.77N	99-53-39.55W	48.5032694	-99.8943194	1682		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
M2	2006-AGL-4360-OE	#68	Determination of Marking and Lighting	48-30-29.37N	99-54-4.50W	48.5081583	-99.90125	1734		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
M1	2006-AGL-4361-OE	#69	Determination of Marking and Lighting	48-30-20.37N	99-54-12.78W	48.5056583	-99.90355	1688		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
J3	2006-AGL-4362-OE	#71	Determination of Marking and Lighting	48-30-1.08N	99-55-50.05W	48.5003	-99.9305694	1684		406	White Paint Only	White Paint Only	10/13/2021
J2	2006-AGL-4363-OE	#72	Determination of Marking and Lighting	48-30-5.97N	99-55-39.43W	48.5016583	-99.9276194	1706		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
J1	2006-AGL-4364-OE	#73	Determination of Marking and Lighting	48-30-11.91N	99-55-30.21W	48.5033083	-99.9250583	1668		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
K1	2006-AGL-4365-OE	#75	Determination of Marking and Lighting	48-30-22.96N	99-54-54.36W	48.5063778	-99.9151	1712		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
A4	2008-AGL-3639-OE	4	Determination of Marking and Lighting	48-32-31.38N	100-1-30.68W	48.54205	-100.0251889	1662		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
D1	2008-AGL-3640-OE	8	Determination of Marking and Lighting	48-31-23.09N	99-56-28.14W	48.5230806	-99.94115	1694		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
E2	2008-AGL-3641-OE	11	Determination of Marking and Lighting	48-31-17.15N	100-1-42.42W	48.5214306	-100.02845	1616		406	White Paint Only	White Paint Only	10/13/2021
E4	2008-AGL-3642-OE	13	Determination of Marking and Lighting	48-31-27.08N	100-1-20.28W	48.5241889	-100.0223	1612		406	White Paint Only	White Paint Only	10/13/2021
F1	2008-AGL-3643-OE	15	Determination of Marking and Lighting	48-30-34.13N	100-1-9.59W	48.5094806	-100.0193306	1660		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
F3	2008-AGL-3644-OE	18	Determination of Marking and Lighting	48-30-40.28N	100-33.01W	48.5111889	-100.0091694	1636		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
G2	2008-AGL-3645-OE	21	Determination of Marking and Lighting	48-30-12.35N	100-34.27W	48.5034306	-100.0095194	1610		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
G3	2008-AGL-3646-OE	23	Determination of Marking and Lighting	48-30-12.20N	100-8.96W	48.5033889	-100.0024889	1622		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
G6	2008-AGL-3648-OE	30	Determination of Marking and Lighting	48-30-23.33N	99-59-4.85W	48.5064806	-99.9846806	1656		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
A8	2008-AGL-3649-OE	35	Determination of Marking and Lighting	48-32-14.57N	99-58-8.36W	48.5373806	-99.9689889	1658		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
L3	2008-AGL-3653-OE	54	Determination of Marking and Lighting	48-31-2.46N	99-54-31.75W	48.51735	-99.9088194	1670		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
H2	2008-AGL-3654-OE	58	Determination of Marking and Lighting	48-30-42.26N	99-56-26.02W	48.5117389	-99.9405611	1710		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
K2	2008-AGL-3655-OE	76	Determination of Marking and Lighting	48-30-6.23N	99-54-45.94W	48.5017306	-99.9127611	1688		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
E3	2008-AGL-3656-OE	77	Determination of Marking and Lighting	48-31-28.67N	100-1-41.92W	48.5246306	-100.0283111	1596		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
E5	2008-AGL-3657-OE	78	Determination of Marking and Lighting	48-31-30.79N	100-1-8.08W	48.5252194	-100.0189111	1580		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
A3	2008-AGL-3658-OE	79	Determination of Marking and Lighting	48-32-35.81N	100-1-51.17W	48.5432806	-100.0308806	1642		406	White Paint Only	White Paint Only	10/13/2021
L2	2008-AGL-3661-OE	82	Determination of Marking and Lighting	48-31-2.14N	99-55-.12W	48.5172611	-99.9167	1684		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
M7	2008-AGL-3663-OE	84	Determination of Marking and Lighting	48-31-1.31N	99-53-20.83W	48.5170306	-99.8891194	1668		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
M6	2008-AGL-3664-OE	85	Determination of Marking and Lighting	48-30-48.78N	99-53-20.65W	48.51355	-99.8890694	1660		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
J4	2008-AGL-3665-OE	86	Determination of Marking and Lighting	48-29-59.82N	99-56-5.78W	48.49995	-99.9349389	1654		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
K3	2008-AGL-3666-OE	87	Determination of Marking and Lighting	48-29-58.02N	99-54-54.04W	48.49945	-99.9150111	1682		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
Q2	2008-AGL-3669-OE	90	Determination of Marking and Lighting	48-28-30.79N	99-57-45.18W	48.4752194	-99.96255	1624		406	White Paint Only	White Paint Only	10/13/2021
N1	2008-AGL-3671-OE	92	Determination of Marking and Lighting	48-28-57.11N	99-56-38.11W	48.4825306	-99.9439194	1700		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
N2	2008-AGL-3672-OE	93	Determination of Marking and Lighting	48-28-58.87N	99-56-25.40W	48.4830194	-99.9403889	1636		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
P1	2008-AGL-3673-OE	94	Determination of Marking and Lighting	48-28-39.65N	99-55-4.44W	48.4776806	-99.9179	1672		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
P2	2008-AGL-3674-OE	95	Determination of Marking and Lighting	48-28-45.52N	99-54-50.47W	48.4793111	-99.9140194	1692		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
S5	2008-AGL-3675-OE	96	Determination of Marking and Lighting	48-27-9.00N	99-53-33.61W	48.48525	-99.8926694	1654		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
R2	2008-AGL-3677-OE	98	Determination of Marking and Lighting	48-28-9.01N	99-55-4.84W	48.4691694	-99.9180111	1696		406	White Paint Only	White Paint Only	10/13/2021
R3	2008-AGL-3678-OE	99	Determination of Marking and Lighting	48-28-14.81N	99-54-53.32W	48.4707806	-99.9148111	1672		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
R4	2008-AGL-3679-OE	100	Determination of Marking and Lighting	48-28-19.70N	99-54-41.36W	48.4721389	-99.9114889	1678		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
S1	2008-AGL-3681-OE	102	Determination of Marking and Lighting	48-27-35.75N	99-54-25.81W	48.4599306	-99.9071694	1644		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
S2	2008-AGL-3682-OE	103	Determination of Marking and Lighting	48-27-43.88N	99-54-16.06W	48.4621889	-99.9044611	1640		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
S3	2008-AGL-3683-OE	104	Determination of Marking and Lighting	48-27-42.59N	99-53-32.50W	48.4618306	-99.8923611	1690		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
S4	2008-AGL-3684-OE	105	Determination of Marking and Lighting	48-27-16.24N	99-53-26.56W	48.4545111	-99.8907111	1626		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
B2	2008-WTE-3085-OE	38	Determination of Marking and Lighting	48-32-2.72N	99-57-30.10W	48.5340889	-99.9583611	1667		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
B3	2008-WTE-3086-OE	39	Determination of Marking and Lighting	48-32-4.49N	99-57-10.30W	48.5345806	-99.9528611	1670		406	White Paint Only	White Paint Only	10/13/2021
C2	2008-WTE-3087-OE	43	Determination of Marking and Lighting	48-31-55.88N	99-55-51.28W	48.5321889	-99.9309111	1704		406	White Paint Only	White Paint Only	10/13/2021
C3	2008-WTE-3088-OE	45	Determination of Marking and Lighting	48-31-58.87N	99-55-29.71W	48.5330194	-99.9249194	1687		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
C4	2008-WTE-3089-OE	47	Determination of Marking and Lighting	48-32-1.25N	99-55-7.43W	48.5336806	-99.9187306	1668		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
A6	2008-WTE-3090-OE	81	Determination of Marking and Lighting	48-32-32.53N	100-58.32W	48.5423694	-100.0162	1687		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
Q1	2008-WTE-3091-OE	89	Determination of Marking and Lighting	48-28-19.92N	99-57-51.30W	48.4722	-99.96425	1627		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
Q3	2008-WTE-3092-OE	91	Determination of Marking and Lighting	48-28-33.20N	99-57-31.82W	48.4758889	-99.9588389	1626		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
R1	2008-WTE-3093-OE	97	Determination of Marking and Lighting	48-28-6.82N	99-55-17.65W	48.4685611	-99.9215694	1655		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
D2	2008-WTE-3094-OE	106	Determination of Marking and Lighting	48-31-22.22N	99-56-10.50W	48.5228389	-99.93625	1673		406	White Paint Only	White Paint Only	10/13/2021
D3	2008-WTE-3095-OE	107	Determination of Marking and Lighting	48-31-25.46N	99-55-54.77W	48.5237389	-99.9318806	1693		406	White Paint Only	White Paint/Synchronized Red Lights	9/30/2021
G7	2009-WTE-1418-OE	108	Determination of Marking and Lighting	48-30-29.62N	99-58-53.76W	48.5082278	-99.9816	1605		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
Q4	2009-WTE-3419-OE	88	Determination of Marking and Lighting	48-28-32.77N	99-57-9.40W	48.4757694	-99.9526111	1620		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
L1	2009-WTE-7953-OE	#60	Determination of Marking and Lighting	48-30-44.06N	99-54-45.61W	48.5122389	-99.9126694	1700		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
Met Tower	2009-WTE-8408-OE	Met 1	Determination of Marking and Lighting	48-27-.00N	99-57-8.93W	48.45	-99.9524806	1609		199	None	None	10/19/2021
G4	2010-WTE-12213-OE	G-4 (28)	Determination of Marking and Lighting	48-30-13.46N	99-59-25.36W	48.5037389	-99.9903778	1640		406	White Paint/Synchronized Red Lights	White Paint/Synchronized Red Lights	9/30/2021
ADLS Tower	2021-WTE-3154-OE	ADLS Tower	Determination of Marking and Lighting	48-29-58.99N	99-58-11.05W	48.4997194	-99.9697361	1590		180	None	None	1

**Exhibit D**

**State Historical Society of North Dakota Letter**



October 22, 2021

Ms. Melanie Medeiros, M.A.  
Project Manager  
SWCA  
Denver Office  
295 Interlocken Boulevard, Suite 300  
Broomfield, CO 80021

**ND SHPO Ref.: 21-6359 FCC TCNS 235893 “A Class I and Class III Cultural Resources Inventory and Visual Assessment for the Proposed Rugby Wind Farm Aircraft Detection Lighting System Project, Pierce County, North Dakota” in portions of [T158N R72W Section 21]**

Dear Ms. Medeiros,

We reviewed ND SHPO Ref.: 21-6359 FCC TCNS 235893 “A Class I and Class III Cultural Resources Inventory and Visual Assessment for the Proposed Rugby Wind Farm Aircraft Detection Lighting System Project, Pierce County, North Dakota” in portions of [T158N R72W Section 21] and find the report by Jolene Schleicher acceptable. We concur with a determination of “No Historic Properties Affected” for this project provided it takes place in the location and in the manner described in the documentation and provided all borrow comes from an approved source.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in further correspondence for this specific project. If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577 or [lsteckler@nd.gov](mailto:lsteckler@nd.gov)

Sincerely,

for William D. Peterson, PhD  
State Historic Preservation Officer  
(North Dakota)

21-6359