



**SPECIAL USE PERMIT APPLICATION  
FOR  
GOOSE CREEK WIND**



**GOOSE CREEK WIND, LLC**  
120 Garrett Street, Suite 700  
Charlottesville, Virginia 22902

**SEPTEMBER 2022**

**Applicant:** Goose Creek Wind, LLC

**Address:** c/o Apex Clean Energy Inc.  
Attn: General Counsel  
120 Garrett Street, Suite 700  
Charlottesville, Virginia 22902

**Authorized Representative:** Ken Young, Chief Operating Officer of the Manager of the  
Sole Member of the Sole Member of the Applicant

**Signature:**



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**Project Contact:** c/o Apex Clean Energy, Inc.  
Attn: Alan Moore, Senior Development Manager  
120 Garrett Street, Suite 700  
Charlottesville, Virginia 22902  
Phone: (434) 328-2303  
Email: [alan.moore@apexcleanenergy.com](mailto:alan.moore@apexcleanenergy.com)

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<sup>1</sup> The Telecommunications Studies, Shadow Flicker Report, Sound Modeling Report, Wildlife Habitat Assessment, and July 2022 FAA Filings (collectively, the “Initial Reports”) all include analysis of either 61 or 71 potential turbine locations (the Shadow Flicker Report includes the 61 potential turbine locations; the other Initial Reports include 71 potential turbine locations). This conservative approach ensured all initial potential turbine locations would be viable with respect to each specific study. Since those studies were completed and as the Project has been further defined, Goose Creek Wind is submitting for Special Use Permit approval with only 60 turbines, or 11 less than the initial 71 potential turbine locations. As indicated in this Special Use Permit Application, Goose Creek Wind intends to develop only 50 of those turbine locations. The Initial Reports are therefore the most conservative analysis as the reduction of 11 of the initial 71 potential turbine locations being considered lessens even further the potential impacts, if any, that are considered in the Initial Reports.

## **1.0 INTRODUCTION**

### **1.1 Project Summary**

Goose Creek Wind, LLC (Applicant or Goose Creek Wind), an indirect subsidiary of Apex Clean Energy Holdings, LLC (Apex), submits this Special Use Permit (SUP) Application (Application) to construct the Goose Creek Wind Project (Project). The Project is located in Blue Ridge, Goose Creek, and Sangamon townships in Piatt County, Illinois. The Project will be approximately 300 megawatts (MW) in size, utilizing the Vestas V162 6.0 MW turbine. This Application seeks siting approval for 60 turbine locations, but not all turbine locations will be utilized when the Project is constructed. Up to 50 turbines will be installed when the Project is built. The Project parcels are depicted on the Project Location Map and the preliminary Site Plan in Appendix B. Applicant either directly, or through exclusive option rights with its affiliate, Goose Creek Expansion, LLC, another indirect subsidiary of Apex, controls the rights to develop the Project on the Project parcels. The Project location was selected based on the area's strong wind resources, land use, landowner interest to host Project facilities, and proximity to existing transmission infrastructure. The Project will produce energy necessary to power approximately 99,000 homes annually.

The Project would bring a capital investment of more nearly \$500 million of clean, cost-effective energy to Piatt County, helping the State of Illinois meet its statutory goal of 100% by 2050 (Climate and Equitable Jobs Act signed into law September 15, 2021; Public Act 102-0662). Over the expected 30-year life of the Project, it would generate approximately \$370 million in direct economic benefits for local landowners, new local employees, Piatt County, and the State of Illinois, in addition to fees associated with permitting the Project. Additional benefits include spending related to these payments that will feed into the local economy in and around the Project Area, and collateral spending during Project construction collateral spending during Project construction and clean renewable energy for the region.

Project staff and representatives have built considerable relationships with local organizations emphasizing the value the Project can bring to the area. This outreach includes contributions in community grants supporting many organizations in the area including Blue Ridge School District, Monticello Community Unity School District #25, Village of DeLand, Monticello Fire Department, Piatt County Soil & Water Conservation District, and more.

The Applicant anticipates that Project construction will commence in the first quarter of 2023. The construction of the Project could be delayed or accelerated depending on several factors, such as permitting, financing, turbine supply, interconnection schedule, and obtaining a Power Purchase Agreement.

The Applicant respectfully requests approval of the following Application by the Piatt County Board of Commissioners (Board) and a recommendation of Approval by the County Zoning Board of Appeals (ZBA). As detailed below, the Applicant has met all requirements set forth in Piatt County's Zoning Ordinance, Appendix A Standards for Wind Energy Conversion Systems over 500 kW (WECS Ordinance). Accordingly, the Applicant respectfully requests that the ZBA vote to recommend approval and the Board vote to approve the Application and issue a SUP to construct and operate the Goose Creek Wind Project.

## 1.2 Applicant Information

Founded in 2009, Apex is a full-service renewable energy company focused on bringing utility-scale generation facilities to market, from site origination and financing to turnkey construction and long-term asset management. Apex's mission-driven team of more than 300 professionals uses a data-focused approach and an unrivaled portfolio of projects to create solutions for the world's most innovative and forward-thinking customers. Headquartered in Charlottesville, Virginia, Apex is expanding the renewable frontier across North America.

Apex's track record of successful transactions and strong relationships in the global financial community underpin its capabilities: since the company's founding, Apex has commercialized more than 30 projects totaling nearly 8 gigawatts (GWs) of capacity, and more than two dozen Apex-originated wind and solar facilities are now operating around the country, totaling approximately 6.5 GW. Operating assets under management have grown to over 2 GW.

In recent years, Apex has expanded its offerings from utility-scale wind and solar to energy storage facilities, distributed energy resources, microgrids, and green fuel technologies. The capacity to build and operate projects—both its own and those owned by third parties—combined with the largest portfolio of projects in the nation gives Apex unprecedented flexibility.

In late 2021, funds and other accounts managed by Ares Management Corporation's Infrastructure and Power strategy acquired a majority stake in Apex. The transaction provides Apex with additional equity growth capital as it seeks to transition to a pure-play renewable energy independent power producer at a moment of heightened demand associated with the new energy economy.

## 1.3 Project Contacts

Apex Clean Energy's Project contacts for Goose Creek Wind are:

Alan Moore  
Senior Development Manager  
Apex Clean Energy  
120 Garrett Street, Suite 700  
Charlottesville, VA 22902  
Phone: (434) 328-2303  
[alan.moore@apexcleanenergy.com](mailto:alan.moore@apexcleanenergy.com)

Scott Koziar  
Vice President of Development, West  
Apex Clean Energy  
120 Garrett Street, Suite 700  
Charlottesville, VA 22902  
Phone (434) 328-2303  
[scott.koziar@apexcleanenergy.com](mailto:scott.koziar@apexcleanenergy.com)

## 2.0 SPECIAL USE PERMIT APPLICATION OVERVIEW

The Piatt County Zoning Ordinance requires the submission of a SUP Application for a Wind Energy Conversion System (WECS) according to the procedures and specifications outlined in Appendix A Standards for Wind Energy Conversion Systems over 500 kW. The following subsections demonstrate how the Applicant meets the requirements of the SUP approval.

### 2.1 Items for Consideration of Special Use Permits

Zoning Ordinance Section IV.A.2.d. states that “before recommending the issuance of such a special use permit, the [Zoning Board of Appeals] may prescribe conditions as will in the Board’s judgement insure that” the list of items included below in italics are met. This section responds to those items as matters that the Zoning Board of Appeals is to consider in proposing conditions and making their recommendation to the County Board regarding the approval or denial of SUP Applications. Following each such item, we have provided a response indicating how the Project and application have and will meet each item:

1. *The establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.*

RESPONSE:

- a. The proposed Project complies with and will operate in accordance with all the requirements of the WECS Ordinance.
- b. The proposed Project is specifically designed to promote the public health, safety, and welfare of the community. It generates renewable energy from a domestic source that does not pollute the air or water, is not subject to the price volatility of fossil fuels and is not subject to potential issues inherent in reliance on foreign-controlled energy sources.
- c. This Application demonstrates that the Project will utilize wind energy turbines that meet all design and safety requirements of the WECS Ordinance. As part of the construction permit applications for each wind energy turbine, a professional engineer will certify that the foundation and tower design both conform to Piatt County and industry standards.
- d. This Application demonstrates that the Project complies with all setback requirements from primary structures, incorporated villages or municipalities, adjacent property lines, public roads, third party distribution and transmission lines, and communication towers, school property, and restricted landing areas or airports, unless waived by the appropriate owner. Compliance with these setback requirements ensures that Project improvements are located at appropriate distances from other uses and roads.
- e. This Application demonstrates, through the report of a qualified acoustics consultant, that the Project will comply with the sound standards of the WECS Ordinance and Illinois Pollution Control Board (IPCB). The sound model utilized conservative assumptions and established that the Project will not emit sound to surrounding residential uses at levels that interfere with the use and enjoyment of such residential uses.



- f. The Applicant has designed the Project to restrict shadow flicker upon any non-participating primary structure to a maximum of 30 hours per year unless expressly waived by the owner of the primary structure. This will essentially eliminate the adverse impact of shadow flicker on primary structures in the area.
- g. This Application demonstrates, through the report of a qualified telecommunications consultant, that interference with television reception is unlikely. Pursuant to the WECS Ordinance and Village of DeLand Compensation and Waiver of Siting Authority Agreement, after the Project begins operation, the Applicant will resolve any complaints of any television reception caused by the Project, if any.
- h. This Application demonstrates, through the report of a qualified telecommunications consultant, that the Project will not interfere with any radio transmissions, microwave paths, emergency communications, or other existing telecommunication systems.
- i. This Application includes a decommissioning study by an Illinois licensed engineer which estimates the cost to decommission the Project in accordance with the WECS Ordinance. The decommissioning study estimates the net decommissioning cost for the Project is currently \$42,926 per turbine. Decommissioning financial security will be posted based on the estimated decommissioning cost as required by the WECS Ordinance and the Agricultural Impact Mitigation Agreement (AIMA) entered into with the Illinois Department of Agriculture. The decommissioning cost estimate will be updated during the life of the Project as required by the WECS Ordinance and the AIMA.
- j. The wildlife habitat studies completed for the Project and provided to U.S. Fish and Wildlife Service (USFWS) and Illinois Department of Natural Resources (IDNR) demonstrate that the Project is unlikely to negatively affect the environment or wildlife. Nearly all of the land in the Project Area is used for agricultural production, and the agricultural use of this land will continue and will not be negatively impacted by the Project. Furthermore, the Project has sited turbines to comply with recommended buffers and setbacks by USFWS and IDNR.
- k. This Application includes the findings made by the Federal Aviation Administration (FAA) that a substantially similar layout will not interfere with aviation and was deemed to not pose a hazard to aviation. The FAA issued Determinations of No Hazard for a layout of 59 turbines and turbines up to 742 feet above ground level. The Applicant filed the layout included in this Application on July 29, 2022, and based on the FAAs approval of a significantly similar layout within the same Project Area, anticipates Determinations of No Hazard in Q4 2022.
- l. This Application includes a mitigation agreement with the U.S. Department of Defense (DoD) that limits the Project to no more than 54 wind turbines up to 742 feet and two permanent meteorological towers up to 443 feet to avoid impacts to military airspace and operations. A letter from the DoD is include in Appendix G.
- m. Operation of radio frequencies for federal government use is managed by the National Telecommunications and Information Administration (NTIA), which is part of the U.S. Department of Commerce. The NTIA has confirmed no reviewing

federal agencies have concerns with wind turbine construction in the Project Area (see Appendix F).

- n. Finally, the Project will provide significant property tax benefits to Piatt County and other taxing districts, such as local school districts, fire districts, road districts, and Goose Creek District Library which entities specifically benefit and protect the public health, safety, morals, comfort and general welfare. The Project will create approximately 500 construction jobs in Piatt County during construction, 8 new permanent jobs in the community, and provide significant stimulus to the local economy during the life of the Project. The full economic impact analysis is included in Appendix C.
2. *The special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted nor substantially diminish and impair property values within the neighborhood.*

RESPONSE:

- a. Use and enjoyment of residential property in the vicinity of the Project will not be injured because the Project meets all the setback standards as to non-participating property owners. In addition, this Application demonstrates that the Project will comply with the noise standards of the Illinois Pollution Control Board, and the Project will limit shadow flicker on primary structures to a maximum of 30 hours per year, unless waived by the primary structure owner. The sound study is included in Appendix F and the shadow flicker study is included in Appendix F. This Application also establishes that the Project is not likely to cause any interference with TV reception, and the Applicant has committed to resolve any such complaints pursuant to the WECS Ordinance and the Village of DeLand Compensation and Waiver of Siting Authority Agreement (Appendix F).
- b. Use and enjoyment of the agricultural property in the immediate vicinity of the Project will not be harmed because the land surrounding the wind turbines will remain farmland and will continue to be farmed. Goose Creek Wind has coordinated with landowners hosting facilities on the siting facilities on their property. The Project will not negatively affect the agricultural uses of the surrounding properties. The significant rental payments to local agricultural landowners over the life of the Project will support and preserve agricultural use of their land and have enhanced economic benefits to the entire community. See both the Economic Impact Analysis and Market Impact Analysis reports included in Appendices C and F, respectively.
- c. The Project will not diminish property values within the immediate area. Goose Creek Wind has demonstrated through its property valuation expert that the value of residential properties located near wind energy turbines in Illinois have not diminished as a result of wind energy projects. A Market Impact Analysis report is included in Appendix F.

3. *The establishment of the special use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.*

RESPONSE:

- a. The Project will not impede the normal and orderly development and improvement of the surrounding properties for the uses permitted in the Agricultural district. Nearly all the property surrounding the Project is already developed with existing agricultural uses, as permitted by the Zoning Ordinance. The Project will not impair any existing or future agricultural uses.
  - b. To the extent surrounding properties may be developed for other uses permitted in the Zoning Ordinance, such as limited residential uses, the Project will not impede the development of such uses. The Project complies with all required setbacks and sound standards. The Applicant demonstrates, through use of a qualified professional property valuation expert, that the Project will not diminish the value of nearby residential parcels. A Market Impact Analysis report is included in Appendix F. To the contrary, the economic benefits of the Project will support the County, schools, police, fire, township, and other governmental entities that enhance the value and strength of the community.
4. *Adequate utilities, access roads, drainage, and/or other necessary facilities will be provided.*

RESPONSE:

- a. The Project does not require any expenditures by Piatt County or other units of local government to extend public services to the Project. The Project will include the construction of all access roads to all wind energy turbines and other improvements per the requirements of the WECS Ordinance, the Applicant shall enter into a road use agreement with Piatt County and other affected road jurisdictions to ensure that the existing roadways are sufficient for the development of the Project, and the Applicant will make, at its expense, any road improvements necessary. The Project will obtain all necessary permits from the entities having jurisdiction over roadways used for the Project prior to obtaining construction permits, as defined by the WECS Ordinance.
- b. The Applicant will protect the existing drainage in the vicinity of the Project and promptly repair any damage to drain tile or any other drainage improvements. Goose Creek Wind has executed an AIMA with the Illinois Department of Agriculture which requires that the Project minimize impacts upon the agricultural uses, quickly repair any damage to drain tiles, and restore land after construction or decommissioning to its pre-Project state. In addition, and consistent with the latest text amendments to section VII.R. of the WECS Ordinance, Goose Creek Wind continues to coordinate with local drainage districts regarding their facilities in the Project Area (see Section 3.10.18 of this Application).

5. *Adequate measures will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.*

RESPONSE:

- a. This Application shows that all parcels in the Project have access via public roads. Accordingly, the Project has sufficient ingress and egress.
  - b. The Project will enter into Road Use Agreements (RUAs) with Piatt County, applicable townships, and potentially the Village of DeLand, if municipal roads will be utilized. The RUAs will provide for necessary improvements to County and local roads for construction and operation of the Project, and to ensure that the County and local roads will be safe for travel by the general public during and after construction of the Project. The Applicant will construct, at its expense, any public road improvements required for the installation and maintenance of the Project.
  - c. Once the Project is constructed, it will create minimal vehicular traffic for maintenance and operations, and accordingly, will not cause traffic congestion in the public streets.
6. *The establishment, maintenance and operation of the special use will be in conformance with the preamble to the regulations of the district in which the special use is proposed to be located.*

RESPONSE:

- a. The Project is located entirely in the Agriculture district (A-1 and A-C), and the primary intent of the Agriculture district, as set forth in the Zoning Ordinance, is to protect and ensure the continuation of agricultural uses. The Project will utilize only a small fraction of agricultural ground for each wind energy turbine and access road (approximately 0.25 to 0.5 acre, which comprises 0.1% of the total Special Use Area). Accordingly, nearly all of the land within the Project Area will continue to be utilized for agricultural purposes, consistent with the intent of the agricultural zoning district. The Project will not have any negative impact upon the continued agricultural use properties in the vicinity of the Project.
- b. The Project will protect and preserve the agricultural use and culture in the area by ensuring a diverse revenue stream to supplement the income of local farmers, who can reinvest that revenue into agricultural land use and the community. The revenue stream is a protection against sometimes uncertain agricultural commodities markets and the potential fluctuation in the cost of farming operations and supplies (e.g., gas prices). Outside of the small amount of land actually needed to site the wind farm, the remaining land of participating and neighboring farms is unaffected and can continue to farm without additional, more intrusive developments that might not be consistent with the rural character of the community.

7. *The special use shall in all other respects conform to the applicable regulations of the district in which it is located, and the Board shall find that there is a public necessity for the special use.*

RESPONSE:

- a. This Application demonstrates the Project satisfies all of the standards of the Zoning Ordinance, including setback requirements, sound regulations, shadow flicker regulations, design regulations and other standards.

## 2.2 Special Use Permit Application Checklist

The SUP Application provides a Project narrative, supporting studies, maps, required agreements, and other related documentation that demonstrates that this Project will comply with the applicable provisions of the Use Standards for WECS. These standards were developed by Piatt County to assure that any SUP authorized by the County Board will comply with the aforementioned narrative criteria. Table 2.2-1 is a detailed cross reference sheet, which notes the sections of the Use Standards applicable to this Project and the corresponding information contained in this Application required to demonstrate compliance with the WECS Ordinance.

| WECS Ordinance Reference | Requirement  | Location in Application    |
|--------------------------|--|----------------------------|
| V                        | Special Use Permit Application                       |                            |
| V.B.(1)                  | A WECS Project Summary                               | 1.1                        |
| V.B.(1)(a)               | A general description of the project                 | 3.1 and Appendix B         |
| V.B.(1)(b)               | Applicant Information                                | 1.2                        |
| V.B.(2)                  | Names and Addresses                                  | 3.2                        |
|                          | 1. Applicant   | 3.2.1                      |
|                          | 2. WECS Owner  | 3.2.2                      |
|                          | 3. WECS Operator                                     | 3.2.3                      |
|                          | 4. Property Owners                                   | 3.2.4 and Appendix A, B    |
| V.B.(3)                  | Site Plan  | 3.3 and Appendix B         |
| V.B.(4)                  | Supporting Documentation                             | 3.4 and Appendix C         |
|                          | 1. Community Engagement                              | 3.4.1                      |
|                          | 2. Economic Benefits                                 | 3.4.2                      |
| V.B.(5)                  | Financial Assurance                                  | 3.5 and Appendix D         |
| V.B.(7)                  | An executed Agricultural Impact Mitigation Agreement | 3.6 and Appendix E         |
| V.B.(8)                  | Property Values Study                                | 3.7 and Appendices A and F |
| V.B.(9)                  | Map of Overlapping Drainage District(s)              | 3.8 and Appendix B         |
| VI                       | Fees   | 3.9                        |
| VII                      | Design and Installation                              | 3.10                       |
| VII.A                    | Design Safety Certification                          | 3.10.1                     |
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| VII.E                    | Turbine Consistency                                  | 3.10.5                     |
| VII.F                    | Compliance with the FAA                              | 3.10.6 and Appendix G      |
| VII.G                    | Lighting   | 3.10.7                     |

| <b>Table 2.2-1<br/>SUP Application Key to WECS Ordinance Requirements</b> |  |                                |
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| <b>WECS Ordinance Reference</b>   | <b>Requirement</b>                                       | <b>Location in Application</b> |
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| XIII  | Decommissioning Plan                                     | 3.16 and Appendix F            |

### 3.0 USE STANDARDS FOR WECS

In Piatt County, the lead permitting body for a wind farm is the County Board of the county in which the project is located following a public hearing and recommendation by the Zoning Board of Appeals. The Illinois Counties Code expressly authorizes a county to “establish standards for wind farms and electric generating wind devices” (See 55 ILCS 5/5-12020). Pursuant to this authority, Piatt County confirmed that wind farms were acceptable uses in the designated zoning districts subject to satisfying the standards for wind farms which the County approved in the WECS Ordinance approved by the County. The WECS Ordinance specifies a variety of compliance requirements for approval of a SUP application. Those requirements were specifically adopted by Piatt County, in its own words, for the following purposes:

- 1. To assure that any development and production of wind-generated electricity in Piatt County is safe and effective; [and]*
- 2. To facilitate economic opportunities for local residences.*

This chapter describes the Use Standards for WECS, as outlined in Piatt County’s WECS Ordinance and demonstrates that the Project conforms to each Use Standard and therefore meets the County’s requirements for being safe and effective and for providing economic opportunities for local residents.

#### 3.1 WECS Project Overview

The Project includes approximately 69,750 acres of agricultural land (Project Area) in northern Piatt County, Illinois, with the center of the Project Area located 11 miles north of Monticello. The Project is roughly bounded by the Piatt-McLean County line to the north, the Piatt-Dewitt County line to the west, Goose Creek, the Sangamon River and Interstate 72 to the south, and the Piatt-Champaign County line to the east. The transportation corridors within the Project Area include Interstate 74, U.S. Highway 150, Illinois State Highway 10, and several roads that fall under the jurisdiction of the County and local Road Districts.

The Project will be approximately 300 MW, comprised of 50 wind turbines. Goose Creek Wind is proposing to use the Vestas V162 6.0 MW turbine at 344.5 feet (105 meters) hub height with a rotor diameter of 531.5 feet (162 meters) and a tip height of 610.2 feet (186 meters). Throughout Section 3 of this Application, Goose Creek Wind demonstrates compliance with the SUP standards for the Vestas V162 turbine.

In addition to wind turbines, the Project will consist of:

- Access roads to each turbine.
- Underground 34.5 kilovolt (kV) electrical collector lines connecting the turbines to the collector substation and associated facilities.
- Underground fiber-optic cable for turbine communications co-located with the collector lines.
- A 34.5 kV to 345 kV “step-up” Project substation owned by Goose Creek Wind.
- An O&M building co-located with the substation.
- An Aircraft Detection Lighting System (ADLS), if approved by the FAA.

- Temporary construction facilities such as laydown yards and a concrete batch plant.
- A 2.25-mile 345 kV overhead transmission line.

Electricity generated by the Project will be delivered to a single point of interconnection on the existing overhead Goose Creek Energy Center to Maroa East 345 kV transmission line running southwest-northeast through the southern portion of the Project Area. Project facilities are included on the preliminary Site Plan in Appendix B.

The Project Area is largely utilized for agricultural purposes with corn and soybeans as the predominant crops. All wind turbines will be located on land currently used for growing crops with each turbine and access road utilizing approximately 0.25 to 0.50 acres of land, which comprises less than 0.1% of the total Special Use Area. The access roads to each turbine will comprise most of this acreage. In some cases, existing field lanes are being upgraded to an access road. Both landowners and tenant farmers can use the access roads for agricultural purposes. In addition, construction and operation of the Project will not significantly affect current land use in the Project area, and crop production can continue up to and surrounding the wind turbines and access roads. Outside of the small amount of land actually needed to site the wind farm, the remaining land of participating and neighboring farms is unaffected and can continue to be farm unlike other more intrusive developments that might not be consistent with the rural character of the community.

This portion of Piatt County is considered an excellent location for constructing and operating a wind farm. The area contains large, open, and flat farmland, a strong wind resource, close proximity to existing transmission infrastructure, interested landowners and broad community support, readily accessible transportation routes for delivery and construction of turbine components, and suitable topography to support turbine foundations.

## **3.2 Names and Addresses**

### **3.2.1 Applicant**

The Applicant is:

Goose Creek Wind, LLC  
120 Garrett Street, Suite 700  
Charlottesville, VA 22902

### **3.2.2 WECS Owner**

The Owner of the WECS is:

Goose Creek Wind, LLC  
120 Garrett Street, Suite 700  
Charlottesville, VA 22902

### **3.2.3 WECS Operator**

The Operator of the WECS is:

Goose Creek Wind, LLC  
120 Garrett Street, Suite 700  
Charlottesville, VA 22902



### **3.2.4 Project Participants**

Community support for development of the wind farm has been positive, as landowners have signed 151 agreements allowing their land to participate in the Project across approximately roughly 34,218 participating acres and 434 parcels (Participating Landowners).

The Project's compensation package will provide approximately \$210 million in payments to Participating Landowners over the course of the Project's 30-year life. The Project includes a total of 151 agreements with property owners which includes leases for turbine locations or other WECS related improvements, underground collection easements, and other agreements with property owners who want to participate in the Project. The compensation formula in the full landowner leases includes a community pool in which landowners receive payments for signed acreage, turbines hosted on signed parcels, and other facilities installed on signed parcels such as underground collection cables and turbine access roads. This type of lease agreement pays all participants, even those that do not get the opportunity to host wind facilities on their property. Some landowners chose not to sign a full lease but were willing to host only underground collection cables that pay an amount based on the linear length of cable installed. And finally, some landowners chose not to host turbines or any associated facilities, or owned parcels that were prohibited from hosting facilities due to the size and/or location, but nonetheless wanted to support a wind farm through an agreement that offer an annual payment.

All the land for which facilities are sited at the Goose Creek Wind Project has been secured through agreements that were voluntarily signed. One Purchase Option Agreement, which allows the property to be purchased in the future, has been signed for the substation and operations and maintenance (O&M) building. The Site Control map included in Appendix B illustrates that all parcels hosting any type of facility for the Project have signed an agreement. The names, addresses, and telephone numbers of the Participating Landowners in the Project are included in Appendix A. Additionally, memoranda reflecting lease or easement agreements entered into with Participating Landowners, can also be found in Appendix A.

Goose Creek Wind is designating a subset of these Participating Landowner parcels as SUP parcels – those parcels with signed agreements for which Goose Creek Wind has proposed facilities or is including for siting flexibility pending final engineering, geotechnical studies, and wetland delineations, and for which Applicant is requesting a SUP to construct WECS facilities on the parcels. The SUP parcels include 92 agreements covering approximately 26,745 acres across 304 parcels. The remaining Participating Landowner parcels are designated as Goose Creek Wind parcels – those parcels with signed agreements and support for the Project without facilities, for which Applicant does not require a special use permit.

### **3.3 Site Plan**

A preliminary site plan for installation of the WECS Project is included in Appendix B. This preliminary site plan includes all proposed Project facilities: turbines, access roads, collection lines, meteorological towers, collector substation, transmission line, switching station, operations and maintenance building, and laydown/staging areas. In addition, the preliminary site plan depicts primary structures, property lines, setback lines, public access roads and preliminary turnout locations, third party above ground transmission lines, substations, preliminary laydown area, preliminary batch plant, and other structures. This preliminary site plan identifies 60 potential turbine locations; however, no more than 50 of these locations will be used when the Project is constructed. The selection of turbine sites for construction will be made during the final implementation stage of the Project. No anchor bases or guy wires are planned for the Project.

All turbine positions comply with the Piatt County setbacks described in Section VII.L of the WECS Ordinance; these are discussed in more detail in Section 3.10.12 of this Application.

The final site plan will be subject to final engineering and other development considerations and will be provided to the Piatt County Zoning Officer (or such other County staff that is responsible for issuing building permits) for review prior to issuance of building permits. Although the site plan is not finalized, no turbine locations on the preliminary site will be moved more than 150 feet.

### **3.4 Supporting Documentation**

This Application and its appendices contain all studies, report, certifications, and approvals required to demonstrate compliance with the applicable provisions in the Piatt County Zoning Ordinance. Additional studies are included in this Application as supporting documentation that are not explicitly required by the WECS Ordinance. A summary of Goose Creek Wind's community engagement and Community Grant Program is described below and included in Appendix C. An economic impact analysis is also included in Appendix C that documents the local and regional economic benefits that will result from the Project.

#### **3.4.1 Community Engagement**

Project staff and representatives have built considerable relationships with local leaders and organizations, emphasizing the value the Project can bring to the area. This outreach includes contributions in community grants supporting many organizations in the Piatt County community. Between October 2019 and July 2022, Goose Creek Wind has awarded almost \$120,000 to local programs, organizations, community projects, schools, and community services that generally fall into four categories: building healthy communities, economic development, environmental sustainability, and promoting education. Of course, most grant awards fit into more than one category. A summary of the Project's community grant program is included in Appendix C.

#### **3.4.2 Economic Benefits**

The Project is expected to create both short-term and long-term benefits to the local economy. Local economic benefits from construction activities would be short-term but significant. Local businesses, such as restaurants, grocery stores, hotels, and gas stations, would see increased business during this phase from construction-related workers. Local industrial businesses, including aggregate and cement suppliers, welding and industrial suppliers, hardware stores, automotive and heavy equipment repair, electrical contractors, drain tile installers, and maintenance providers, would also likely benefit from construction of the Project.

The Project represents a capital investment of nearly \$500 million in Piatt County. Over the expected 30-year life of the Project, it would generate up to roughly \$370 million in direct economic benefits for local landowners, new local employees, Piatt County, and the State of Illinois, in addition to fees associated with permitting the Project. Dr. David Loomis with Strategic Economic Research completed an Economic Impact Study assessing the short-term and long-term increases in jobs, income, and tax revenues for Piatt County and the State of Illinois from the Project.<sup>2</sup> The Economic Impact Study is provided in Appendix C and a summary of the total direct economic benefits expected to be produced by the Project is included in Table 3.4-1 below. Indirect benefits are not quantified below but are included in Dr. Loomis' study. Those indicated

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<sup>2</sup> Dr. Loomis is also Professor of Economics at Illinois State University and co-founder of the Center for Renewable Energy.

benefits include spending related to these direct payments that will feed into the local economy in and around the Project Area.

| Payment  | Beneficiary  | Approximate Total  |
|--|--|--|
| Lease Payments                                     | Project Landowners   | <ul style="list-style-type: none"> <li>Up to \$210 million over 30 years</li> </ul>  |
| Construction                                       | ~585 direct and indirect jobs in Piatt County                                    | <ul style="list-style-type: none"> <li>\$33.7 million in new earnings in Piatt County during construction<sup>3</sup></li> <li>\$69.2 million in new earnings in Illinois during construction</li> </ul> |
| Operations   | ~8 long-term onsite direct jobs, and ~23 long-term indirect jobs in Piatt County | <ul style="list-style-type: none"> <li>\$1.2 million in new annual earnings in Piatt County</li> <li>\$3.6 million in new annual earnings in Illinois</li> </ul>   |
| Taxes paid to taxing jurisdictions in Piatt County | Piatt County   | <ul style="list-style-type: none"> <li>Over \$89.5 million</li> </ul>  |
| Permit Fees  | Piatt County   | <ul style="list-style-type: none"> <li>\$495,000</li> </ul>  |

To educate local small business leaders and owners about the contracting opportunities available with the construction and operation of a wind farm, the Project initiated a local vendor program. Key to the success of the program was communicating with the local Rotary, local Chamber of Commerce, individual outreach to businesses, and advertising in the county paper of record. Over twenty different local businesses participated or contacted members of the Apex construction and development team directly.

Dr. Loomis' report also breaks down the projected tax revenues to various taxing bodies in Piatt County from the Project according to the valuation formula developed by the Illinois Department of Revenue.<sup>4</sup> Table 3.4-2 below summarizes the results of Dr. Loomis' analysis, which are discussed in greater detail in his report in Appendix C.

| Taxing Entity              | Average Annual Revenue over 30 years | Lifetime (30 years) Revenues |
|----------------------------|--------------------------------------|------------------------------|
| Local School Districts     | \$1,849,521                          | \$55,485,647                 |
| Piatt County               | \$435,430                            | \$13,062,914                 |
| Local Townships            | \$126,682                            | \$3,800,438                  |
| Local Road Districts       | \$221,303                            | \$6,639,082                  |
| Parkland Community College | \$203,022                            | \$6,090,667                  |
| Local Fire Districts       | \$105,049                            | \$3,151,478                  |

<sup>3</sup> The Piatt County numbers are embedded in the State of Illinois numbers so should not be added separately to get a total benefit amount.

<sup>4</sup> Illinois Department of Revenue. Wind Energy Device Valuation. <http://www.revenue.state.il.us/LocalGovernment/PropertyTax/WindEnergyDeviceValuation.pdf>

| <b>Table 3.4-2<br/>Projected Property Tax Revenues Generated from 300 MW</b> |   |                                     |
|--|---|-------------------------------------|
| <b>Taxing Entity</b>   | <b>Average Annual Revenue over 30 years</b> | <b>Lifetime (30 years) Revenues</b> |
| Goose Creek District Library   | \$15,758                                    | \$472,747                           |
| Forrest Preserve   | \$28,445                                    | \$853,346                           |
| Multi-Township Assessor  | \$730                                       | \$21,911                            |

In addition to the direct economic benefits and property tax revenues, Goose Creek Wind has offered a Revenue Sharing Agreement with Piatt County. Wind energy projects are large investments in rural communities like Piatt County, and they need to benefit the communities in which they are located. The Goose Creek Wind Project has additional value if it is constructed by the end of 2023 and this agreement commits Goose Creek Wind to sharing that additional value with the local community. The Revenue Sharing Agreement does not obligate the Zoning Board to recommend approval or the county Board to approve the Project.

Goose Creek Wind also entered into a Compensation and Waiver of Siting Authority Agreement, in which Goose Creek Wind agrees to annually pay the Village of De Land the greater of (1) \$75,000 or (2) \$2,000 per MW of total nameplate capacity that is installed between 0.75 miles and 1.5 miles from the Village of DeLand’s corporate boundaries (representing up to approximately \$108,000 in annual payments), contingent on Goose Creek Wind ultimately siting at least one wind turbine between 0.75 miles and 1.5 miles from the Village of De Land’s corporate boundaries. These payments on the low end are approximately 18% of the Village of DeLand’s annual budget.

**3.5 Financial Assurance**

Appendix D includes copies of the draft forms of financial assurance for the Decommissioning Plan and road repairs as required in Sections XIII.E and VII.O.(1)(b)(3)(e) of the WECS Ordinance, respectively. In accordance with the WECS Ordinance, the financial assurance will be provided with the construction permit(s).

**3.6 Agricultural Impact Mitigation Agreement**

The Illinois Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147/1, et seq.) requires the owner of a wind farm to enter into an AIMA prior to a public hearing on a siting permit application. Section V.B.(7) of the WECS Ordinance requires an executed copy of the AIMA be included with the Special Use Permit. The intent of the AIMA is to preserve and/or restore the integrity of affected agricultural land during construction and decommissioning activities. A copy of the executed AIMA between the Applicant and Illinois Department of Agriculture, dated July 7, 2022, is included in Appendix E.

**3.7 Property Value Impact Study**

Section IV.A.2.d of the Zoning Ordinance allows the Board to prescribe conditions to ensure that a Project will not substantially diminish and impair property values of surrounding properties. MaRous and Company conducted a detailed analysis of the Project Area, reviewed literature of county assessors in Illinois and other states across the Midwest and examined home and property sales in wind projects around the region. The result of the review by MaRous and Company is a study that determined that the Project would not have a negative impact on rural residential or

agricultural property values in the surrounding area. MaRous and Company have extensive experience conducting market analyses of a variety of energy projects in the Midwest, as well as residential, commercial, and industrial developments, religious facilities, and recreational use sites. A copy of the study is provided in Appendix F. Goose Creek Wind does not have a specific so-called good neighbor plan or property value guarantee plan because the Project is in compliance with the standards that were established, and is supported by the reports of qualified experts, to confirm no material adverse impact on neighbors or their property values. While there is no formal plan or criteria which automatically provides or allows for doing so, Goose Creek Wind has entered into Participation Agreements with certain local property owners who desire to participate in the Project even though they may not have Project improvements on their properties. While these Participation Agreements can differ, a template of a typical Participation Agreement can be found in Appendix A.

### **3.8 Map of Overlapping Drainage District(s)**

Appendix B includes a map showing Project facilities and drainage district boundaries delineated in Piatt County's Geographic Information System data. The drainage districts that overlap with the WECS Project (Overlapping Drainage Districts) include:

- Union #1 Goose Creek and Sangamon Drainage District
- Goose Creek #2 Drainage District
- Goose Creek #3 Drainage District
- Goose Creek #4 Drainage District
- DeWitt Special Drainage District
  - DeWitt Special Sub #2
  - DeWitt Special Sub #2A
  - DeWitt Special Sub #2B
- DeLand Special Drainage District
  - DeLand Special Sub #1
- Trenkle Slough/Blue Ridge Drainage District
  - Trenkle Slough/Blue Ridge Sub #1
  - Trenkle Slough/Blue Ridge Sub #2
  - Trenkle Slough/Blue Ridge Sub #3
  - Trenkle Slough/Blue Ridge Sub #3A
  - Trenkle Slough/Blue Ridge Sub #4
  - Trenkle Slough/Blue Ridge Sub #5
  - Trenkle Slough/Blue Ridge Sub #6
  - Trenkle Slough/Blue Ridge Sub #7
- Lotus Special Drainage District
  - Lotus Special Sub #1
  - Lotus Special Sub #2
- Newcomb Drainage District
  - Newcomb Sub #3
  - Newcomb Sub #4

Pursuant to Section V.B.(10) of the WECS Ordinance, Goose Creek Wind will forward a copy of this Application to the drainage district commission of any Overlapping Drainage District and its attorney within five days of filing this Special Use Permit. This Application will be mailed based on contact information provided in the Piatt County Reference & Yearbook, published by the County Clerk (July 2021 edition), which is the most recent publication, and in coordination with the Piatt County Clerk and Recorder, the Champaign County Circuit Clerk's Office, and the DeWitt County Circuit Clerk's Office.

### **3.9 Fees**

Pursuant to the requirements in Section VI of the WECS Ordinance, Goose Creek Wind has provided Piatt County a certified check for \$150,000.00 to satisfy the WECS Ordinance's fee schedule for a wind energy conversion system special use.

### **3.10 Design and Installation**

#### **3.10.1 Design Safety Certification**

All wind turbines are built to conform to industry standards including the American National Standards Institute (ANSI). Pursuance to Section VII.A.(1) of the WECS Ordinance, Goose Creek Wind will provide certificates of design compliance that equipment manufacturers have obtained from Underwriters Laboratories), Det Norske Veritas, Germanischer Lloyd Wind Energic TUV Nord, or an equivalent third party prior to issuance of the construction permits. The Vestas V162 6.0 MW turbines will be new equipment commercially available; the turbines are not used or experimental.

Should the Board issue a SUP for the Project, pursuant to Section VII.A.(2) of the WECS Ordinance, Goose Creek Wind will present a certification from a qualified structural engineer, as part of the WECS construction permit application, stating that the foundation and tower designs for the Project are compatible with and within acceptable standards given local soil and climate conditions. Based on the preliminary geotechnical analysis, Goose Creek Wind anticipates the foundations and tower designs will be within accepted professional standards given the local soil and climate conditions. Goose Creek Wind will provide certification of such by a licensed professional engineer after the final geotechnical study is completed with the WECS construction permits.

#### **3.10.2 Controls and Brakes**

The hydraulically actuated individual blade pitch systems act as the main braking system for the wind turbine generator. Braking under normal operating conditions is accomplished by feathering the blade out of the wind. Any single feathered rotor blade is designed to slow the rotor. Hydraulic systems are in place to control blade pitch to optimize blade output, decrease power output above the rated wind speeds, or to function as an aerodynamic brake. Upon loss of power from the grid, the hydraulic power will automatically feather the blades to safely brake the turbine before bringing the blades to a complete stop.

The wind turbine generator is also equipped with a mechanical brake located at the output (high-speed) shaft of the gearbox. This mechanical brake is utilized as a parking brake to engage the rotor lock, or in the event an emergency stop button is pressed.

The turbines are also equipped with rotor locking pins for the purpose of securing the rotor during certain maintenance procedures and to allow safe entry into the hub. These pins are hydraulically actuated and can only be engaged manually by technicians in the nacelle. Both the rotor lock and high-speed brake are intended for application of no longer than 24 to 48 hours.

### **3.10.3 Electrical Components**

All electrical components for the Project will conform to applicable national, state and local codes and relevant national and international standards such as ANSI. All electrical wires and cables connecting each wind turbine to other turbines will be installed underground to a depth of at least 60 inches in accordance with participating landowner agreements and the AIMA until they reach the collector substation.

### **3.10.4 Color**

The tower and blades for each wind turbine will be painted with a non-reflective unobtrusive color. The surface of each turbine will consist of non-reflective material. All wind turbine surfaces will be designed to resist erosion. No advertising or signage, outside of safety warnings or standard manufacturer markings, will be affixed to any of the turbines, and each turbine will comply with any other Piatt County ordinances relating to signage.

### **3.10.5 Turbine Consistency**

Goose Creek Wind install one turbine model for the Project. All 50 turbines will have the same tip height and rotor diameter, rotate in the same direction, and be the same color.

### **3.10.6 Compliance with the Federal Aviation Administration**

The FAA has the regulatory authority to evaluate and permit structures which may pose a hazard to aviation. When evaluating a wind farm, FAA issues two determinations under the following federal regulations:

- U.S. Department of Transportation FAA Code of Federal Regulations, Part 77, dated March 1993—Objects Affecting Navigable Airspace; and
- U.S. Department of Transportation FAA Advisory Circular 70/7460-1K, Obstruction Marking and Lighting.

The maximum tip height of the wind turbines proposed for the Project is 610.2 feet above ground elevation. This maximum potential height conforms to the WECS Ordinance's limitation of 625 feet.

In September 2020, Goose Creek Wind submitted a turbine layout filing to the FAA seeking a Determination of No Hazard (DNH) for 54 turbine locations in the Project Area at a turbine height of 742 ft. That application initiated a lengthy review process with the FAA to get a head start on analyzing potential military and aviation impacts of the Project. On January 4, 2021, the DoD notified Goose Creek Wind of potential impacts to military operations. In May 2021, Goose Creek Wind refiled a substantially similar layout as September 2020 to the FAA seeking a DNH for 59 turbine locations at a height of 742 feet. As a result of discussions between Apex Clean Energy and the U.S. Air Force, the parties entered into an agreement signed by the Assistant Secretary of Defense for Sustainment on August 16, 2021, that limits the Goose Creek Wind Project to no more than 54 wind turbines up to 742 feet above ground level and no more than two

meteorological evaluation towers up to 443 feet above ground level. By agreeing to these terms, the Military Aviation and Installation Assurance Siting Clearinghouse cleared the turbines in the FAA's Obstruction Evaluation/Airport Airspace Analysis system. On August 23, 201, the DoD Siting Clearinghouse issued a letter summarizing the terms above, which is included herein in Appendix G. On December 7, 2021, the FAA issued Determinations of No Hazard for the May 2021 layout (see Appendix G).

On July 27, 2022, Goose Creek Wind submitted a final array to the FAA comprising the turbine locations submitted in this Application, fulfilling the requirement in Section VII.F of the WECS Ordinance. That application is included in Appendix G of this Application. Goose Creek Wind notes that the FAA application includes 71 turbine positions for FAA approval; Goose Creek Wind is coordinating separately with DoD and will honor the executed agreement to construct 54 or fewer turbines at a height below 742 feet. Based on the FAA's prior approval of a substantially similar layout at a lower tip height, Goose Creek Wind anticipates FAA approval. The FAA is conducting further study on the proposed turbine array with a final determination expected in Q4 2022.

### **3.10.7 Lighting**

Section VII.G of the WECS Ordinance requires an applicant to install ADLS or other similar technology to reduce light pollution and visual impacts caused by WECS Towers provided the lighting technology is available and approved by the FAA. Wind turbines are required to have appropriate lighting to effectively alert aircraft of turbine locations, as regulated by the FAA. ADLS uses a combination of radar and associated software to control when turbine lights turn on. Under normal conditions, the lights stay off. With this radar system, turbine lighting (synchronized flashing red lights) is off until the radar detects an aircraft within a prescribed distance to the Project, at which time, the blinking red lights turn on. After the aircraft is safely beyond the Project, the blinking lights are again turned off. This can significantly reduce the amount of time turbine lights are on and minimize potential nighttime light concerns. Goose Creek Wind has informed the FAA that it plans to file an application for ADLS after the agency issues final determinations on the final turbine array submitted on July 27, 2022. Consistent with Section VII.G of the WECS Ordinance, prior to wind turbine tower section installation, Goose Creek Wind will provide Piatt County with the FAA-approved lighting plan, and, if approved by FAA, the location of the ADLS tower(s).

### **3.10.8 Warnings**

Signage, including a visible warning concerning voltage and an 24/7 emergency contact number, will be placed at the Project Substation, as well as at the entrance of access roads that connect to each Project wind turbine. For the Vestas V162 6.0 MW turbines, the transformer is located in the nacelle; it is not pad-mounted at the base of the turbine and, therefore, warnings concerning voltage will be located at the entrance of the access road. In addition, 911 address signs that conform to the County specifications for size, color, and reflectivity will be placed at the entrance of the access road to each turbine. Each turbine access road will also have a sign that indicates the turbine number and provide a toll-free telephone number to be answered twenty-four hours a day seven days per week for emergency calls and informational inquiries, consistent with Section VII.H.(3) of the WECS Ordinance.

The wind turbine towers, by design, will be self-supporting and not require guy wires or anchor bases. If guy wires are used for the permanent met towers, they will have reflective warning markers.



### 3.10.9 Climb Prevention

Access to the inside of wind turbines will be limited to Project employees. Each wind turbine will be mounted on a tubular tower which will be a smooth, tapered monopole structure. The only climbing access will be by ladder or lift located inside the tower. The door to the tower will be kept locked. By design, the towers will be externally un-climbable.

### 3.10.10 Height

As defined in the WECS Ordinance, the WECS tower tip height is the distance from the rotor blade at its highest point to the top surface of the WECS foundation. Goose Creek Wind is considering one turbine model for the Project: The Vestas V162 6.0 MW turbine at 344.5 feet (105 meter) hub height and a tip height of 610.2 feet (186 meters). The tip height of this turbine is below the 625-foot tip height limit in Section VII.J of the WECS Ordinance.

### 3.10.11 Blade Clearance

The turbine model proposed for the Project has a blade clearance of at least 20 feet between the ground and the lowest point of the arc of the blades, per Section VII.K of the WECS Ordinance. Blade clearance is approximately 78.7 feet for the Vestas V162 6.0 MW turbine at 105-meter hub height.

### 3.10.12 Setbacks

In designing the layout for the Project, Goose Creek Wind worked with Participating Landowners to minimize impacts to farmland, residential properties, and any other site-specific concerns such as stream crossings. Where possible, the Project also tried to exceed minimum setbacks to Primary Structures.

In taking a conservative approach to setbacks from Project infrastructure, the proposed layout for the Project meets or exceeds the setbacks prescribed under Section VII.L of the WECS Ordinance as follows and as shown in the County Setbacks map in Appendix B:

- **Setback from Primary Structures:** All WECS Towers shall be set back 1.3 times the tower tip height of the tower, or 1600 feet, whichever is greater, from any Primary Structure in existence or which has received construction permits for construction as of the date of application of the special use permit. Distance shall be measured from the point of the Primary Structure foundation closest to the WECS Tower to the center of the WECS Tower foundation. The owner(s) of the Primary Structure may waive this setback requirement in writing; but in no case shall a WECS Tower be located closer to a Primary Structure than 1,000 feet.
  - For the Vestas V162 6.0MW turbine at 105m hub height, 1.3 times the turbine tip height is 794 feet. Therefore, all turbines are sited at least 1,600 feet from non-participating primary structures and at least 1,200 feet from participating primary structures (those who have signed a waiver), as measured from the closest point of the primary structure to the center of the WECS tower.
- **Setback from Incorporated Village or Municipality:** An incorporated village or municipality must approve of the location of any tower to be located within 1.5 miles of the corporate limits of such incorporated village or municipality.

- Goose Creek Wind entered into a Compensation and Waiver of Siting Authority Agreement with the Village of DeLand, in which the Village of DeLand waives siting authority and delegates all siting authority to the County for above-ground WECS facilities (including wind turbines) between 0.75 miles and 1.5 miles of the village boundary. A copy of this agreement is included in Appendix E.
- The preliminary site plan includes up to 9 turbines sited on leased land within 1.5 miles of the Village of DeLand corporate boundary that might be subject to the Compensation and Waiver of Siting Authority Agreement between Goose Creek Wind and the Village of DeLand.
- Turbines are setback more than 1.5 miles from Mansfield and Farmer's City.
- **Setback from Adjacent Property Lines:** All WECS Towers shall be set back 1.1 times the tower tip height or 1,000 feet, whichever is greater, from adjacent property lines, as measured from the closest edge of the tower structure.
  - For the Vestas V162 6.0MW turbine at 105m hub height, 1.3 times the turbine tip height is 794 feet. Therefore, all turbines are sited at least 1,000 feet from non-participating property lines, as measured from the closest edge of the turbine.
- **Setback from all Public Roads, Third Party Distribution and Transmission Lines, and Communications Towers:** All WECS Towers shall be set back a distance of at least 1.1 times the WECS Tower Tip Height from the nearest edge of the existing right of way of public roads as of the date of application of the special use permit. Distance shall be measured from the nearest edge of the road right of way of such public road in existence as of the date of approval of the special use permit. The Township Highway Commissioner or County Highway Engineer, or similar authorized representative with respect to local or state roadways, may waive this setback requirement as to roads within their respective jurisdictions.
  - For the Vestas V162 6.0MW turbine at 105m hub height, 1.1 times the turbine tip height is 672 feet. Therefore, all turbines are sited at least 672 feet from the edge of the right-of-way from public roads, transmission and distribution lines, and communication towers.
- **WECS Substation Setback:** All WECS substations shall be set back 1,600 feet from the property line of any property containing a primary structure.
  - The Project Substation is located at least 1,600 feet from the property line of any property containing a primary structure.
- **Setback from School Property Line:** All WECS towers shall be 1.5 miles from any school property line. The affected school may waive this setback requirement, but in no case shall a WECS Tower be located closer to a school property line than 1600 feet.
  - All turbines are sited outside the 1.5-mile setback from school property lines.

- **Setback from Restricted Landing Area or Airport:** There shall be at least 3,500 feet separation from the exterior above-ground base of a WECS tower to any Restricted Landing Area or Airport.
  - There are no FAA-registered airports or landing areas in the Project Area; Goose Creek Wind has implemented the 3,500-foot setback from restricted landing areas and airports in the Project Area.

### **3.10.13 Drainage Repair**

Section VII.M of the WECS Ordinance requires the Applicant to repair waterways, drainage ditches, field tiles, or any other infrastructures damaged during construction, maintenance phases, upgrading, and decommissioning. In addition, the lease agreements with Participating Landowners and the AIMA include requirements pertaining to repair of drainage tiles. Goose Creek Wind will comply with all state and local requirements related to the treatment and repair of drainage tiles, including recent provisions amended to the WECS Ordinance in July 2022; these are discussed in Sections 3.8 and 3.10.18 of this Application.

### **3.10.14 Compliance with Additional Regulations**

The Project will require various regulatory permits, reviews, and approvals. Table 3.10-1 provides a summary of the required permits, approvals, and consultations for the Project. All permits, licenses, approvals, or consultations which are required for the Project will be obtained in the applicable areas prior to construction beginning.

| <b>Table 3.10-1<br/>Status of Required Federal, State, and Local Approvals</b> |  |  |  |
|--|--|--|--|
| Administering Agency   | Permit, Approval, or Consultation  | Applicability to the Project   | Status   |
| <b>Federal</b>   |  |  |  |
| U.S. Army Corps of Engineers   | Federal Clean Water Act Section 404  | Dredging or filling jurisdictional waters of the United States.  | To be obtained prior to construction, if necessary.  |
| U.S. Fish and Wildlife Service (USFWS)   | Review for Threatened and Endangered Species   | Consultation on potential impacts to species protected under the Endangered Species Act  | Goose Creek Wind has been coordinating with USFWS since 2019 and is developing a short-term Habitat Conservation Plan for federally listed bats.   |
| Environmental Protection Agency  | Spill Prevention Control and Countermeasure Plan                                       | Required if any facility associated with the Project (substation) has oil storage of more than 1,320 gallons   | To be prepared prior to construction, if necessary.  |
| Federal Aviation Administration (FAA)  | Form 7460-1 Notice of Proposed Construction or Alteration (Determination of No Hazard) | <ul style="list-style-type: none"> <li>• Construction or alteration of structures standing higher than 200 feet above ground level</li> <li>• Construction or alteration of structures near airports; 14 Code of Federal Regulations 77.13 provides details</li> <li>• Siting within radar line of-sight of an air defense facility</li> </ul> | Filed July 29, 2022 (Appendix G); anticipate Determinations of No Hazard in Q4 2022.   |
|  | Notice of Actual Construction or Alteration (Form 7460-2)                              | Supplemental notice provided to FAA in advance of beginning construction.  | To be provided in advance of or after commencing construction, as appropriate.   |
|  | Marking & Lighting Recommendations   | Required for approval of Aircraft Detection Lighting System (ADLS)   | 7460-1 filing will include standard red/white synchronized lights, but the FAA filings will be modified to request approval of ADLS after receiving the ADLS design and prior to construction. |

| <b>Table 3.10-1<br/>Status of Required Federal, State, and Local Approvals</b>           |   |  |  |
|--|---|--|--|
| <b>Administering Agency</b>  | <b>Permit, Approval, or Consultation</b>  | <b>Applicability to the Project</b>  | <b>Status</b>  |
| Federal Communications Commission  | Radio Station Authorization/License   | Typically required for operation of communications tower associated with ADLS.                       | If needed, prior to operation of ADLS communications tower.  |
|  | Registration  | Typically required for communications tower associated with ADLS.                                    | Prior to construction/installation of ADLS communications tower.   |
| U.S. Department of Commerce – National Telecommunications and Information Administration | Notification to National Telecommunications and Information Administration and review by Interdepartmental Radio Advisory Committee               | Typically required to confirm no impact to federal telecommunications.                               | Goose Creek Wind received a letter on August 2, 2022, confirming no concerns in the Project Area (Appendix F). |
| <b>State of Illinois Approvals</b>   |   |  |  |
| Illinois Environmental Protection Agency   | Clean Water Act Section 401 Water Quality Certification   | Construction activities requiring a Section 404 permit also require certification under Section 401. | To be obtained prior to construction, if necessary.  |
|  | Clean Water Act Section 402 National Pollutant Discharge Elimination System – General Permit to Discharge Stormwater from Construction Activities | Construction activity that results in the disturbance of 1 acre of more of total land area           | To be obtained prior to construction.  |
|  | General Operating Permit for Air Emissions from Concrete Batch Plant  | Permits air emissions from stationary and/or portable concrete batch plants.                         | To be obtained prior to construction, if necessary.  |

| <b>Table 3.10-1<br/>Status of Required Federal, State, and Local Approvals</b>     |   |  |   |
|--|---|--|---|
| <b>Administering Agency</b>  | <b>Permit, Approval, or Consultation</b>  | <b>Applicability to the Project</b>  | <b>Status</b>   |
| Illinois Historic Preservation Division, State Historic Preservation Office (SHPO) | Cultural and Historic Resources Review and Review of State and National Register of Historic Places (NRHP) and Archeological Survey | Projects that have state permitting requirements are obligated to consult.   | Goose Creek Wind has completed a literature review of the Project Area, and Project Facilities avoid previously identified NRHP listed, eligible, or unevaluated archaeological and historic sites. Goose Creek Wind will conduct field surveys for previously unidentified cultural resources in summer 2022 and coordinate with SHPO on any potential mitigation, if necessary. |
| Illinois Pollution Control Board   | 35 Ill. Admin Code Sections 900, 901, and 910   | Activities that emit noise that have the potential to be audible beyond the edge of the property on which the activity is occurring.                       | The Project complies with sound regulations for wind farms – see Section 3.12 and Appendix F.   |
| Illinois Department of Natural Resources (IDNR)                                    | Statewide Permit #2 – Construction of Bridge and Culvert Crossings of Streams in Rural Areas  | Required for construction of bridge and culvert crossings of streams in rural areas of the state   | To be obtained prior to construction, if applicable.  |
|  | Statewide Permit #8 – Underground Pipeline and Utility Crossings  | Required for construction of underground pipeline and utility crossings across waterways, floodplains, and wetlands.                                       | To be obtained prior to construction, if applicable.  |
|  | Statewide Permit #12 – Bridge and Culvert Replacement Structures and bridge Widening  | Required for replacement of existing bridges and culverts and the widening of existing bridges over waterways, floodplains, and streams regulated by IDNR. | To be obtained prior to construction, if applicable.  |
|  | Statewide Permit #13 – Temporary Construction Activities  | Required for construction activities in waterways, floodplains, and streams  | To be obtained prior to construction, if applicable.  |

| <b>Table 3.10-1<br/>Status of Required Federal, State, and Local Approvals</b> |   |   |  |
|--|---|---|--|
| Administering Agency   | Permit, Approval, or Consultation   | Applicability to the Project  | Status   |
|  | Water withdrawal reporting  | Required for withdrawals from surface water or ground water sources at a rate of 70 gallons per minute or greater (100,000 gallons per day)   | To be obtained prior to construction, if applicable. |
|  | Consultation with IDNR (EcoCAT)   | State and local governments are required to consider impacts of proposed actions on Illinois endangered and threatened species as well as sites listed on the Illinois Natural Areas Inventory. | Complete – see Section 3.13 and Appendix F           |
| Illinois Department of Agriculture   | Executed Agricultural Impact Mitigation Agreement   | Required per Section V.B.(7) of the WECS Ordinance.   | Executed July 7, 2022 (Appendix E)                   |
| Illinois Department of Transportation (IDOT)                                   | Oversize/Overweight Permit for State Highways   | Vehicles and loads that surpass legal dimension and weight limits   | To be obtained prior to construction.                |
|  | Access Driveway Permits for IDOT Roads  | Construction of driveway or other access onto state road rights of way  | To be obtained prior to construction.                |
|  | Permit to perform work within State Highway Right-of-Way  | Installation of underground or overhead structures crossing or occupying state road rights of way.  | To be obtained prior to construction.                |
| <b>Local Approvals</b>   |   |   |  |
| Piatt County   | Special Use Permit  | Required for construction of a commercial wind farm over 500 kW   | Filed August 2022                                    |
| Piatt County   | Right-of-way permits, crossing permits, driveway permits for access roads, oversize/overweight permits for County Roads | Goose Creek Wind will enter into a Road Use Agreement (RUA) prior to construction.  | To be obtained prior to construction permits.        |

| <b>Table 3.10-1<br/>Status of Required Federal, State, and Local Approvals</b> |  |  |   |
|--|--|--|---|
| <b>Administering Agency</b>  | <b>Permit, Approval, or Consultation</b> | <b>Applicability to the Project</b>  | <b>Status</b>                                 |
| Piatt County   | Building/Construction Permit             | Required to construct, make addition to, or reconstruct a building or structure.                             | To be obtained prior to construction.         |
| Townships (Goose Creek, Blue Ridge, Sangamon)                                  | RUA                                      | Goose Creek Wind will enter into a RUA for any proposed non-county roads that will be used for construction. | To be obtained prior to construction permits. |
| DeWitt-Piatt Bi-County Health Department                                       | Well/Septic Permits                      | Required for establishing new water source or sewage system (O&M building)                                   | To be obtained prior to construction.         |



### **3.10.15 Use of Public Roads**

Goose Creek Wind has engaged in discussions with Piatt County's Engineer and applicable Road Commissioners on identification of public roads that the Applicant intends to use and draft RUAs. Goose Creek Wind expects to execute RUAs with Piatt County, applicable townships, and potentially the Village of DeLand, if municipal roads will be utilized; these agreements will be in place before issuance of a WECS construction permit as required in Section VII.O the WECS Ordinance. As part of the RUAs, Goose Creek Wind provide the Zoning Officer with:

- the list of roads to be used,
- an executed copy of applicable weight and size limit permits from appropriate governmental units having jurisdiction over identified public roads,
- a proposed repair plan, the pre-construction baseline survey prepared and sealed by a State of Illinois Licensed Professional Engineer to determine existing road and bridge conditions,
- the method to conduct a post-construction baseline survey,
- proposed remediation or compensation to the appropriate governmental unit having jurisdiction over identified public roads for any actual measured damage to public roads and bridges, and
- performance/surety bonds or other financial assurance documents required to guarantee the performance of the RUAs.

Goose Creek Wind includes a draft performance bond in Appendix D for the RUA.

Goose Creek Wind may implement several Best Management Practices (BMPs) to control dust including mulching exposed soils, wetting exposed soils, maintaining vegetative cover, and reduced speed limits. These BMPs will be designed and detailed as part of the National Pollutant Discharge Elimination System permit and associated Stormwater Pollution Prevention Plan administered by the Illinois Environmental Protection Agency.

### **3.10.16 911 Addressing**

Pursuant to Section VII.P of the WECS Ordinance, Goose Creek Wind will provide GIS shapefiles of the turbine locations and associated access roads to Piatt County prior to issuance of the construction permits. This information will be used for E-911 addresses for each of the wind turbines and the Project substation and O&M building.

### **3.10.17 Terms**

Notwithstanding any other provisions of the Piatt County Zoning Ordinance, Goose Creek Wind understands that a SUP for a WECS shall be effective and may be relied upon so long as construction of the WECS is commenced within 36 months after issuance of the Special Use Permit, which period may be extended by the County Board without further public hearing. Goose Creek Wind anticipates starting construction in Q1 2023.

### **3.10.18 Use of Drainage District Facilities/Drainage to Farmland**

As discussed in Section 3.8 of this Application, Goose Creek Wind identified the Overlapping Drainage Districts for which Project facilities are proposed (also see the Overlapping Drainage District(s) map in Appendix B). Goose Creek Wind has been coordinating with these drainage districts since May 2022 and continues to coordinate with each Overlapping Drainage District to obtain maps and data of their facilities (e.g., surface drains, underground drainage tiles, open drainage ditches, culverts, and water gathering vaults) that are reasonably believed to be impacted by the WECS Project (Impacted Drainage Facilities). Goose Creek Wind will conduct a pre-construction baseline survey prepared by a State of Illinois Licensed Profession Engineer and provide this survey at least 14 days prior to submitting the construction permit application to each Overlapping Drainage District(s)' Drainage Commissioner and their attorney for which there are Impacted Drainage Facilities.

In addition to coordination with Overlapping Drainage Districts, Goose Creek Wind will, to the extent practical and in coordination with the Overlapping Drainage District, contact landowners and tenants for their knowledge of the drainage facilities locations prior to construction. This is a standard practice for Goose Creek Wind. All identified Impacted Drainage Facilities as defined in the WECS Ordinance will be located and marked prior to construction.

Pursuant to Section VII.R.(3), prior to issuance of the construction permits, Goose Creek Wind will provide the County Zoning Officer with a fully executed written work agreement with any Overlapping Drainage District's Commission governing the parties' rights related to the Impacted Drainage Facilities or, in the absence of such agreement, a written statement describing its attempts to reach an agreement with the Overlapping Drainage District's Commissioner regarding Impacted Drainage Facilities.

### **3.11 Project Operations**

The Project will be staffed locally from an O&M building co-located with the Project's substation. The Project will be operated and maintained by a team of roughly 8 personnel, including facility managers, a site manager, and a certified crew of technicians. All contact information for the Project's facilities including the names of key Project staff will be provided to relevant Piatt County and Project Road District officials and authorities, and participating landowners.

#### **3.11.1 Project Maintenance**

During operations, the O&M staff will perform scheduled, preventive maintenance on the turbines. This is typically done in conjunction with representatives from the turbine manufacturer. Turbine maintenance is performed twice a year as a semiannual and annual maintenance. Semiannual maintenance is conducted on the turbine for 10 hours with a crew of technicians. It consists of lubrication, fluid checks, minor electrical inspections and checks of turbine functionality. The annual maintenance is a 36-hour inspection with a crew of technicians. During this inspection, the entire turbine is maintained, including but not limited to bolt torque checks on tower and all major components, lubrication and filter changes, electrical inspections, pitch calibrations, and blade inspections. The on-site operations team also will drive throughout the Project on a daily basis conducting visual inspections of the Project. This team will be at the Project site or O&M building during normal business hours and will also have specified personnel on-call 24 hours per day, seven days per week, should an issue arise outside of normal business hours.

Pursuant to Section VIII.A of the WECS Ordinance, Goose Creek Wind will provide re-certification documentation from a third-party should turbine maintenance require any physical modification to the turbines that alters the mechanical load, mechanical load path, or major electrical components (certification described in Section 3.10.1 of this Application). This re-certification will be provided prior to any physical modification. Any like-kind replacements shall not require the re-certification.

### **3.11.2 Interference**

To assess potential interference with telecommunications – specifically microwave beam paths, local emergency service providers (911 operators), broadband, and television service – Goose Creek Wind contracted with Evans Engineering to conduct communications analyses as required in Sections VIII.B.(1) and VIII.B.(2) of the WECS Ordinance. The study found that no Federal Communications Commission (FCC)-licensed land mobile or public safety transmitting stations are expected to be adversely affected as turbines are sited at a distance to avoid interference. Similarly, turbines are sited to avoid interference with microwave beam paths. The study also concludes that no interference to cellular reception or fixed broadband reception is anticipated. Lastly, the study assessed television channels within and beyond 1½ miles of the footprint of the Project to serve as a baseline reading for television reception conditions prior to the construction of the Project. The study indicates steps that may be taken should interference occur due to operations of the Project. A copy of the communications study is attached to the Application in Appendix F.

In addition to FCC-licensed telecommunications, operation of radio frequencies for federal government use is managed by the NTIA, which is part of the U.S. Department of Commerce. On June 9, 2022, Goose Creek Wind submitted a notification letter to the NTIA describing the Project to determine potential impacts. After a 45-day review period, Goose Creek Wind received a response letter from the NTIA on August 2, 2022, indicating that no reviewing federal agencies had concerns with wind turbine construction in the Project Area. A copy of the response letter is included in Appendix F.

Based on this study, Goose Creek Wind does not anticipate any interference to telecommunications. However, Goose Creek Wind will provide a Project summary and final site plan to the applicable microwave transmission providers and local emergency service providers. If, after construction of the Project, Goose Creek Wind receives a written complaint related to interference with microwave beam paths, local emergency service providers, broadband, or television, the Project commits to undertaking commercially reasonable steps to respond to a written complaint related to interference caused by the Project as is required by the WECS Ordinance and Village of DeLand Compensation and Waiver of Siting Authority Agreement (Appendix E).

### **3.11.3 Coordination with Local Fire Department**

Section VIII.C of the WECS Ordinance requires that the Applicant cooperate with local emergency responders to develop an emergency response plan. Goose Creek Wind provides a draft Emergency Action Plan (EAP) in Appendix F. This draft plan is intended to demonstrate the attention, diligence, and resources the Applicant dedicates to safety and responding to emergency situations of all kinds. Goose Creek Wind has shared the draft EAP with the Northern Piatt and Cornbelt Fire Protection Districts (located in Mansfield and Mahomet, respectively) and is actively coordinating with other local responders (DeLand Fire Protection District) to finalize the plan in the coming months.

In addition, on June 28, 2022, the Applicant's Manager of Health and Safety, Jason Conley, coordinated with Todd Jones, fire chief of Northern Piatt Fire Protection District and John Koller, fire chief of Cornbelt Fire Protection District, to host an initial emergency response training session. The primary purpose of the training session was to introduce the Project, provide information about safety issues related to the wind farm construction and operation, and to set up communication channels for future coordination. The discussion was focused around one of Apex Clean Energy's core values of safety, and how we remain diligent on validating this throughout the duration of the project, during construction, as well as once the site is fully operational. The Apex Team, including Mr. Conley, who is a seasoned safety professional with experience in emergency response, was create lines of communication and establish important relationships for future collaboration to help ensure safe operations at and around the Project.

As required in Section VIII.C of the WECS Ordinance, Goose Creek Wind will provide the final site plan to local fire departments prior to issuance of the construction permits. In addition, Goose Creek Wind will provide, at its expense, annual training and necessary equipment to local emergency responders so they can properly respond to a potential emergency at the Project. The first emergency response trainings/drill will commence within 6 weeks of operations and be conducted annually thereafter. The Applicant will also cooperate with local emergency responders to develop an emergency operation plan that will be submitted to the Piatt County Emergency Management Agency for review and approval prior to construction permits.

#### **3.11.4 Materials, Handling, Storage, and Disposal**

All solid wastes generated during the construction, operation, and maintenance of the Project will be removed from the site promptly and disposed of in accordance with all federal, state and local laws and regulations regarding waste disposal in accordance with Section VIII.D. of the WECS Ordinance.

It is not anticipated that the construction, operation and maintenance of the Project will result in the generation of any hazardous wastes. If hazardous waste is produced it will be handled according to local, state, or federal laws and regulations. Safety Data Sheets will be retained at the O&M building and copies of these sheets will be provided to the local fire departments in accordance with federal laws and regulations.

#### **3.11.5 Shadow Flicker**

Goose Creek Wind hired EDR to perform a shadow flicker modeling analysis for the proposed Project turbines. WindPRO, a standard industry software, was used to perform the shadow flicker modeling. EDR modeled the Vestas V162 6.0MW turbine at 105m hub height for 1,213 primary structures within the Project Area and approximately one mile buffer. The analysis is over-inclusive and therefore incorporated conservative assumptions since it evaluated 61 potential turbine locations, although only 50 turbine locations will be utilized for the Project. Additionally, the analysis included turbine positions in the adjacent Sapphire Sky Project located in adjacent McLean County to account for potential cumulative impacts.

The study from EDR, which is provided in Appendix F, shows no non-participating primary structures will exceed the 30 hours per year shadow flicker limit. One participating primary structure will have between 30 and 35 hours of shadow flicker per year; this participant has signed a waiver of the 30 hour per year limit. As such, turbines are sited in compliance with the WECS Ordinance.

As required by Section VIII.E.(3) of the WECS Ordinance, Goose Creek Wind will provide an updated Shadow Flicker analysis at the time of construction permits for wind turbines.

### 3.12 Noise Levels

The IPCB has promulgated regulations under 35 Ill. Admin. Code Sections 900, 901 and 910 that are applicable to wind farms. Under 35 Ill. Admin. Code §901, a WECS Project operating in an agricultural field (Class C Land) cannot cause an exceedance of sound levels to residential land (Class A Land) as highlighted in the excerpt below:

*35 Ill. Admin. Code Section 901.102 Sound Emitted to Class A Land*

#### DAYTIME SOUND LEVELS

- a) *Except as elsewhere provided in this Part, a person must not cause or allow the emission of sound during daytime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land that exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A land. Sound pressure levels must be measured at least 25 feet from the property-line-noise-source.*

| <b>Table 3.12-1<br/>Allowable Octave Band Sound Pressure Levels of Sound Emitted to any Receiving Class A Land from Classes A, B, and C Land during Daytime Hours</b> |   |                     |                     |
|---|---|---------------------|---------------------|
| <b>Octave Band Center Frequency (Hertz)</b>   | <b>Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from</b> |                     |                     |
|   | <b>Class C Land</b>   | <b>Class B Land</b> | <b>Class A Land</b> |
| 31.5  | 75  | 72                  | 72                  |
| 63  | 74  | 71                  | 71                  |
| 125   | 69  | 65                  | 65                  |
| 250   | 64  | 57                  | 57                  |
| 500   | 58  | 51                  | 51                  |
| 1000  | 52  | 45                  | 45                  |
| 2000  | 47  | 39                  | 39                  |
| 4000  | 43  | 34                  | 34                  |
| 8000  | 40  | 32                  | 32                  |

#### NIGHTTIME SOUND LEVELS

- b) *Except as provided elsewhere in this Part, a person must not cause or allow the emission of sound during nighttime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land that exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A land. Sound pressure levels must be measured at least 25 feet from the property-line-noise-source.*

| Octave Band Center Frequency (Hertz) | Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from |              |              |
|--------------------------------------|--|--------------|--------------|
|                                      | Class C Land   | Class B Land | Class A Land |
| 31.5                                 | 69   | 63           | 63           |
| 63                                   | 67   | 61           | 61           |
| 125                                  | 62   | 55           | 55           |
| 250                                  | 54   | 47           | 47           |
| 500                                  | 47   | 40           | 40           |
| 1000                                 | 41   | 35           | 35           |
| 2000                                 | 36   | 30           | 30           |
| 4000                                 | 32   | 25           | 25           |
| 8000                                 | 32   | 25           | 25           |

(Source: Amended at 42 Ill. Reg. 20453, effective November 1, 2018)

### **Sound Compliance Study**

Goose Creek Wind hired RSG to perform a sound modeling analysis for the proposed Project turbines. RSG modeled the Vestas V162 6.0MW turbine at 105m hub height for 1,213 primary structures within the Project Area and one mile buffer that could receive turbine sound. The analysis was performed using Cadna-A software in accordance with the standard ISO 9613-2, taking into account typical industry standards for modeling inputs and assumptions. The analysis is over-inclusive and therefore incorporated conservative assumptions since it evaluated 71 proposed turbine locations, although a maximum of 50 turbine locations will be utilized for the Project. Another conservative parameter adopted by the study is that it included a 2 decibel (dB) uncertainty factor on top of the manufacturer’s total sound output values. Additionally, the modeling included turbine positions in the adjacent Sapphire Sky Project located in adjacent McLean County to account for potential cumulative impacts.

The study, attached in Appendix F, demonstrates that the Project complies with the Illinois Pollution Control Board’s noise regulations.

### **3.13 Birds**

Section X of the WECS Ordinance requires that a qualified professional conduct an avian habitat study to determine if the installation of the WECSs will have a substantial impact on birds and/or bats. Goose Creek Wind hired WEST, Inc. to conduct bird, bat, and other rare species habitat assessments in the Project Area. A memo summarizing the wildlife studies and wildlife agency database reviews is provided in Appendix F and summarized below.

Goose Creek Wind has been coordinating with the USFWS and IDNR regarding the potential impact of the Project on flora and fauna since early 2019. This early coordination included data requests and database reviews regarding the potential presence of federal and state threatened and endangered species and eagles (species of concern) in the Project Area. In coordination with USFWS and IDNR, Goose Creek Wind conducted a series of wildlife surveys and habitat assessments for species of concern with the potential to occur in the Project Area.

Goose Creek Wind used the results from the studies, along with recommendations from the USFWS and IDNR, to inform appropriate impact avoidance, minimization, monitoring, and adaptive management measures for the Project (e.g., facility setbacks or construction timing restrictions). Table 3.13-1 summarizes the measures that Goose Creek Wind has implemented into turbine siting to avoid potential impacts to species of concern. Additionally, associated facilities have been designed to either avoid habitat or implement avoidance measures based on agency coordination (i.e., upland sandpiper habitat).

| <b>Table 3.13-1<br/>Goose Creek Wind's Habitat Avoidance Measures</b> |                             |                    |  |
|---|-----------------------------|--------------------|--|
| Common Name   | Species Status <sup>1</sup> | Potential to Occur | Agency Recommended Avoidance and Setback Implemented by Goose Creek Wind   |
| Indiana bat <sup>2</sup>  | FE, SE                      | Possible           | All proposed turbine rotor swept areas are sited at least 1,000 feet from suitable bat habitat. Turbines will be curtailed at wind speeds up to 5.0 m/s during periods of risk (i.e., fall migration).   |
| Northern long-eared bat <sup>2</sup>                                  | FT, ST                      | Possible           | All proposed turbine rotor swept areas are sited at least 1,000 feet from suitable bat habitat. Turbines will be curtailed at wind speeds up to 5.0 m/s during periods of risk (i.e., fall migration).   |
| Eastern massasauga <sup>2</sup>                                       | FT, ST                      | Unlikely           | While both USFWS and IDNR confirmed this species is very unlikely to occur in the Project Area, all proposed turbines are sited to avoid potential eastern massasauga habitat.   |
| Eastern prairie fringed orchid <sup>2</sup>                           | FT, ST                      | Unlikely           | USFWS confirmed this species is very unlikely to occur in the Project Area. All proposed turbines are sited outside potential habitat.   |
| Kirtland's snake <sup>3</sup>   | ST                          | Unlikely           | While IDNR has confirmed this species is unlikely to occur in the Project area, proposed turbines are sited to avoid potential Kirtland's snake habitat.   |
| Mudpuppy <sup>3</sup>   | ST                          | Unlikely           | While this species is very unlikely to occur in the Project Area given the fact it has not been documented in the County since 1980, Goose Creek Wind has incorporated a 500-foot setback from non-forested perennial streams and 1,000-foot setback from forested streams, per IDNR recommendation <sup>5</sup> .   |
| Sangamon phlox <sup>3</sup>   | SE                          | Possible           | All proposed turbines are sited to avoid potential Sangamon phlox habitat.   |
| Upland Sandpiper <sup>4</sup>   | SE                          | Possible           | Turbines are sited outside upland sandpiper habitat. Construction activities will avoid the breeding season (April 15 – July 31) to the extent practicable. If construction activities for linear facilities occur during the breeding season, suitable habitat will either be removed prior to April 15 (i.e., mowed) or nest surveys will be conducted by a biological monitor to determine if upland sandpiper nests are present. |
| Bald Eagle  | BGEPA                       | Likely             | While this species is likely to occur in the Project Area, there are no bald eagle nests within the Project Area or within 2.0 miles of the Project Area.  |

| <b>Table 3.13-1<br/>Goose Creek Wind’s Habitat Avoidance Measures</b> |   |                    |  |
|---|---|--------------------|--|
| Common Name   | Species Status <sup>1</sup>   | Potential to Occur | Agency Recommended Avoidance and Setback Implemented by Goose Creek Wind |
| 1   | FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, ST = State Threatened, BGEPA = Bald and Golden Eagle Protection Act.   |                    |  |
| 2   | USFWS, 2022, based on IPaC review   |                    |  |
| 3   | IDNR, 2019 and 2021, based on EcoCAT review   |                    |  |
| 4   | Identified during Avian Use Surveys   |                    |  |
| 5   | Although impacts to the mudpuppy were confirmed to be unlikely and there is no scientific evidence that aquatic species are impacted by turbine vibrations, Goose Creek Wind has incorporated this setback; IDNR recently reduced the 500’ buffer outlined in the EcoCAT to 300’ based on new data. |                    |  |

In addition to siting turbines away from sensitive habitats, Goose Creek Wind has agreed to implement operational measures that have been shown to reduce impacts to listed bat species, including curtailment of turbines during wind conditions and seasons when bats are most likely to be at risk. The siting and operational measures employed are likely to be successful in avoiding impacts to sensitive wildlife, and Goose Creek Wind has agreed to conduct three years of post-construction monitoring to confirm that is the case. As such, substantial adverse impacts to birds and bats are not anticipated.

As a company with a core value of sustainability, Apex Clean Energy endeavors to not only minimize our projects’ impacts, but to ensure that our renewable energy projects further benefit host communities by preserving and restoring natural resources in the vicinity of our projects. Through the Apex Conservation Grant program, each renewable energy project commercialized by Apex will contribute \$1,000 per MW to support local or regional wildlife conservation, reforestation and flora restoration, protection of sensitive habitats such as grassland or wetlands, and other environmental conservation initiatives in or near project communities.

### **3.14 Public Participation**

Section XI of the WECS Ordinance states “Nothing in the Ordinance is meant to augment or diminish existing opportunities for public participation in the County’s consideration of the special use application.” Article IV (Administration) of the Piatt County Zoning Ordinance outlines the Organization of the Board of Appeals including membership, meetings, appeals, and decisions which stipulate that all meetings of the Board shall be open to the public and all business of the Board shall be transacted at such meetings. Goose Creek Wind looks forward to public participation in the SUP process.

### **3.15 Liability Insurance and Indemnification**

Commencing with the issuance of construction permits and continuing through the decommissioning of all wind turbines, Goose Creek Wind will maintain and pay for (a) a general liability insurance policy or policies covering bodily injury and property damage with policy limits of not less than \$10,000,000 per occurrence and \$40,000,000 in the aggregate; and (b) an insurance policy or policies covering environmental pollution liability with policy limits of not less than \$5,000,000. All limits, as required above, will be met with primary and excess policies and the Applicant will ensure that the total amount of insurance coverage provided is equal to or greater than the amount specified herein. Applicant shall maintain such insurance and provide a



certificate of insurance to the County demonstrating proof of this insurance in accordance with Section XII of the WECS Ordinance.

### **3.16 Decommissioning**

Section XIII of the WECS Ordinance requires an applicant to submit a proposed Decommissioning Plan to ensure that the Project is properly decommissioned at the end of its useful life (30 years). The Decommissioning Plan must be prepared by an independent certified Illinois Professional Engineer and must include the following:

- A. A requirement that if any WECS has not been in operation and producing electricity for at least 270 consecutive days, it shall be removed. The Piatt County Zoning Officer shall notify the Owner to remove the system. Within thirty days, the Owner shall either submit evidence showing that the system has been operating and producing electricity or remove it. If the Owner fails to or refuses to remove the WECS, the violation shall be referred to the Piatt County State's Attorney for enforcement.
- B. Provisions for the removal of structures, debris, and cabling on the surface and at least 4' below the surface.
- C. Provisions for the restoration of the soil and vegetation.
- D. An estimate of the decommissioning costs certified by a professional engineer in current dollars, which shall be updated and submitted to the Piatt County Zoning Officer every 5 years.
- E. A financial plan approved by Piatt County to ensure funds will be available for decommissioning and land restoration.
- F. A provision that the terms of the decommissioning plan shall be binding upon the Owner or Operator and any of their successors, assigns, or heirs.
- G. A provision that Piatt County shall have access to the site and to the funds outlined in E. above to effect or complete decommissioning one year after cessation of operations.

Westwood Professional Services (Westwood) prepared a Decommissioning Plan for Goose Creek Wind which both fulfills the decommissioning requirements of the WECS Ordinance and aligns with the decommissioning commitments contained within the Project's AIMA. A copy of the draft Decommissioning Plan is included in Appendix F.

As discussed in more detail in the Decommissioning Plan, decommissioning of Goose Creek Wind includes:

- Removal of all above ground components (turbines, transformers, meteorological towers, substations, operation and maintenance facilities).
- Removal of all turbine, tower, and building foundations to a depth of four feet.
- Removal of all underground collection systems and cables to a dept of four feet.
- Removal of access roads (unless the landowner requests the road to remain) and crane paths.

- Restoration of crane paths and access roads, including decompaction.
- Reclamation, re-grading, and restoration of disturbed areas including topsoil reapplication and decompaction of soils.
- Sediment and erosion controls during and following decommissioning.
- Repair of public roads to pre-decommissioning condition.

Westwood determined the estimated decommissioning costs for all decommissioning activities based on the requirements in the WECS Ordinance as well as cost assumptions based on a variety of factors including the future land use after decommissioning, engineering and construction practices, road and turbine removal, salvage value of Project materials, and more.

Goose Creek Wind includes a draft performance bond in Appendix D for the Decommissioning Plan. Goose Creek Wind will be responsible for all costs to decommission the Project and associated facilities. The estimated decommissioning cost in current dollars is expected to be \$182,510 per turbine, excluding salvage value. Including resale and salvage values, the estimated decommissioning cost in current dollars is expected to be around \$42,926 per turbine after salvage value, including associated facilities. The cost to decommission will depend upon the prevailing equipment and labor costs. Goose Creek Wind anticipates that a portion of the decommissioning costs will be offset by the salvage value of the project components; salvage rates are volatile and difficult to predict many years into the future.

Because of the uncertainties surrounding future decommissioning costs and salvage values, Goose Creek Wind will review and update the cost estimate of decommissioning and restoration for the Project every five years after Project commissioning. This revised cost estimate of decommissioning and salvage value will be submitted to the Piatt County Zoning Officer.

As required by the WECS Ordinance, Goose Creek Wind will provide a final Decommissioning Plan, certified by a professional engineer, prior to the issuance of the construction permits along with the performance bond as financial assurance.