

**Sedgwick County, Colorado,
Special Use Permit Application
May 2024**

**for Utility Scale Wind System,
Overland Pass Energy East**



May 31, 2024

Table of Contents

Section 1: Introduction.....	4
Section 2: Permit Application Requirements for Utility Scale Wind System	5
Facility Owner/Operator Information.....	5
Agent Authorization.....	6
Written Description.....	6
Location Map(s).....	8
Project Photos.....	8
Site Plan	8
Wind Turbine Technology.....	9
Phasing of Development.....	9
Project Phase Assignment.....	10
Collection Easement Corridors.....	10
Utility and/or Transmission Interconnection.....	11
Geotechnical Report	11
Notice to Federal Aviation Administration.....	11
Notice to Operation of Communication Link	12
Notice to Mineral Estate Owners.....	12
Decommissioning Plan.....	12
Proof of Liability Insurance	13
Third-Party Certifications.....	13
Section 4: Request for Reduction of Setback.....	15
Section 5: Additional Application Support Materials.....	17
Project Studies Matrix.....	17
Additional Maps	19
Impact Analysis.....	19
Use of County Road Right of Way and Road Use Agreements/Permits	20
Internal Access Roads.....	21
Dust Mitigation Plan.....	22
Weed Mitigation Plan.....	22



Erosion, Sedimentation, Stormwater Discharge, Air Quality, and Floodplain Analysis..... 22

Light Mitigating Technologies 22

Facility Appearance..... 23

Water and Wastewater Systems 23

Section 6: Attachments 24

Section 1: Introduction

The applicant, Overland Pass Energy, LLC (“OPE”), is a Colorado limited liability company and is a wholly owned subsidiary of National Renewable Solutions, LLC (“NRS”). OPE submits this special use permit application (the “Application”) for a Utility Scale Wind System referred to as the Overland Pass Energy East Wind Project that will include a maximum of three hundred ten (310) wind turbines (the “Project”) located south of US Highway 76 on a portion of the “South Table,” the high plains lying south of the South Platte River Valley and spans from the boundary of Logan County to the west to the boundary of Nebraska to the east and has parcels as far south as the Philips County boundary (the “Project Site”).

In 2023, NRS submitted an application for a special use permit (the “2023 Application”) that was approved by the Board of County Commissioners on August 8, 2023 pursuant to Resolution 2023-027 (the “2023 Permit”). A copy of this Resolution is included as Attachment 1.01. This Application, if approved, is intended to amend, replace, and supersede the 2023 Permit.

Since the 2023 Application was submitted, OPE has hit key milestones that provide strength and certainty to the Project future. Continued landowner support and participation, along with increased commercial offtake interest, has provided an opportunity to develop a larger Project and increase its size and local economic impacts. This Application provides the most up-to-date Project details, but largely mirrors the 2023 Application for ease of review. The surveys, studies, exhibits and maps provided in the 2023 Application have been updated accordingly, as necessary. The differences in this Application from the 2023 Application are primarily related to:

- Increasing the Project acreage and Project size
- Providing the County with more transparency related to the maximum number of wind turbines requested
- Providing the County with more defined Project plans

The submittal of this Application represents an important next step in OPE’s long-term positive relationship with Sedgwick County and its citizens, and in the ongoing and supportive communication between OPE and various departments, boards and entities serving Sedgwick County. With access to some of the strongest wind speed resources in Colorado, the Project will become a stable and long-term contributor to Sedgwick County’s ongoing economic success, energy resiliency, and community-first way of life.

The Project will provide a significant economic impact to both Sedgwick County and the State of Colorado, both during construction and during the Project lifetime. Based on current assumptions of Project size, it is anticipated that the Project will bring a combined impact of \$275 million dollars to Sedgwick County from construction through decommissioning through property taxes, landowner payments, local operations and construction jobs, and the indirect impacts of multiple years of construction. Additionally, the Project will add at least approximately 1275MW of clean energy to Colorado’s quickly growing renewable energy generation, supporting OPE’s role as an independent power producer in the US and helping to make Colorado an eventual leader in locally produced clean



energy. Due to such significant benefits provided by the Project, it is anticipated that OPE will utilize the exemption for renewable energy components applicable to sales and use taxes imposed by the State Department of Revenue.

OPE's guiding principle is to develop renewable energy in a community-based model. We strive to build and sustain partnerships with landowners and communities. Without the support of our landowners and Project community, none of our projects would be possible. We are thankful for the support we have received in the Sedgwick County community, as evidenced by the letters of support included in Attachment 1.02.

OPE looks forward to this step in obtaining approval of this Application and remains faithful to our community-based model. Together we succeed, and OPE is available at your convenience and ready to make this Project a success by working together with Sedgwick County, its public servants, and its citizens, towards a new special use permit for this Project.

Section 2: Permit Application Requirements for Utility Scale Wind System

OPE submits this Application under Section 12 of the Sedgwick County Zoning Resolution and Section 13 of the Sedgwick County Comprehensive Plan and Zoning Ordinance for the Project (collectively, the "Land Use Regulations"), the same Land Use Regulations that NRS followed when it submitted its 2023 Application.

Facility Owner/Operator Information

The Project will be owned and operated by OPE, which is in good standing with the Colorado Secretary of State as of May 31, 2024.

OPE is a wholly owned subsidiary of NRS, a Minnesota limited liability company, incorporated in the State of Minnesota, and in good standing with the Minnesota Secretary of State as of May 31, 2024.

Company Contact Information:

Overland Pass Energy, LLC
11100 Wayzata Blvd STE 450
Minnetonka, MN 55305
(952) 473-7500

National Renewable Solutions, LLC
11100 Wayzata Blvd STE 450
Minnetonka, MN 55305
(952) 473-7500

Overland Pass Office Information:

Overland Pass Energy, LLC
125 Cedar St - Unit 4
Julesburg, CO 80737

Table A: Pertinent Project Personnel

Name	Title	Email address	Telephone number
Chase Marston	Senior Project Developer	cmarston@natrs.com	(651) 448-7018
Walt Page	Project Developer	wpage@natrs.com	(970) 466-0579
Brad Wilson	Vice President of Development	bwilson@natrs.com	(651) 233-3217
Jesse Hopkins-Hoel	Chief Development Officer	jhopkinshoel@natrs.com	(320) 281-9191

Agent Authorization

All participating, private landowners within the Project Site have executed either a land lease and wind easement, renewable energy participation agreements, or underground collection easements with OPE and have executed a standard agent authorization form, by which they have authorized OPE and other Project representatives to take all actions necessary for the Application, processing, issuance and acceptance of any land use permit, special use permit, or other county or state permits for development, construction and operations, or certifications requested by such agents and representatives.

In addition to the participating private landowners in the Project, the State of Colorado Land Board (“SLB”) has executed a wind planning lease. OPE is eager to contribute to the SLB’s mission to both generate income to help fund Colorado schools, and to promote clean, safe, renewable energy for the State.

A table of all parcels of participating, private landowners within the Project Site is included herein as Attachment 2.01 with a coinciding map in Attachment 2.05. All corresponding executed agent authorizations from private landowners and the SLB are included herein as Attachment 2.02.

A Project-specific land lease and wind easement is included herein as Attachment 2.03. To protect the participating landowners and the private information within the agreement, the attached land lease and wind easement has been redacted, except for sections pertaining to certain rights of OPE to act on behalf of the landowner for permitting purposes.

Written Description

The Project is a multi-phase utility scale wind energy system that includes a maximum of three hundred ten (310) wind turbine locations and is comprised of 113,145 acres under land lease and wind easement with OPE. The current Project acreage is an increase of 43,238 acres since the submittal of the 2023 Application, demonstrating the continued engagement and participating from the county landowners. The Project as currently modeled will generate at least approximately 1275MW, though the final installed MWs will vary depending on the final turbine model selected and available commercial offtake opportunities.



The Project Site is exclusively outside of any municipal boundaries, with the nearest boundaries lying 2.7 miles southeast of Julesburg, 3.8 miles south of Ovid, and 3.9 miles south and east of Sedgwick.

The majority of the Project Site is dedicated to dryland/irrigated cultivated crop farming with a small percentage of the area dedicated to pasture/hay, and occasional grassland/fallow ground. The irrigated cultivated crop farming within the Project Site is primarily located in the eastern portion of the Project Site with the western portion of the Project Site being primarily dedicated to dryland farming.

Once constructed, the Project is expected to be comprised of the following generating, public health/safety, and maintenance/operations infrastructure, as a Utility Scale Wind Energy System as defined in the Land Use Regulations:

- Wind Turbine Generators ("WTG") – Up to three hundred ten (310) WTG, though subject to change prior to construction
- Collector substations
- Underground and overhead electrical collection infrastructure and communication lines internal to the Project Site
- Operations and maintenance facilities and buildings
- Crane pads
- Internal access roads
- Light mitigation infrastructure as required by applicable Colorado State Statute, such as Aircraft Detection Lighting Systems ("ADLS")
- Meteorological infrastructure including, but not limited to: MET tower(s) and LiDAR technology
- Additional temporary construction areas as needed, including temporary over-sail easement(s), temporary road construction areas, temporary staging/laydown areas, temporary crane paths, and temporary batch-plant areas

As part of the Project's standard and prudent development and due diligence, and subject to local, state, and federal statute, rules and regulations, numerous primary environmental and jurisdictional studies have been completed since the Project's inception in June 2020, in accordance with the U.S. Fish and Wildlife Services Land-Based Wind Energy Guidelines.

Table B: Expected Project Timeline

Task Description	Expected start date	Expected finish date
Primary environmental screening and environmental and jurisdictional studies	June 1, 2020	Completed January 31, 2023
Continuing prudent environmental studies not related to permitting	January 1, 2022	Completed November 15, 2023
Sedgwick County permitting	January 1, 2023	August 8, 2023
Sedgwick County Permitting – Project expansion	May 31, 2024	Fall 2024

Overland Pass 1: Crossing agreements and permits, road use agreements, right of way agreements, franchise agreements, etc.	October, 2024	March 2025
Overland Pass 1: FAA non-hazard determinations	Jun 2022	October 2023
Wind resource assessment	September 1, 2020	October 2024
Overland Pass 1: Engineering	January 1, 2021	March 2025
Overland Pass 1: Survey and pre-construction	January 1, 2024	March 2025
Overland Pass 1 Wind farm construction	May 2026	September 2027
Overland Pass 1 Turbine commissioning, interconnection, and Commercial Operations Date "COD"	July 2026	September 2027
Future phasing estimated construction	Spring 2027	December 2028
Turbine commissioning, interconnection, and COD	Spring 2027	December 2028

Location Map(s)

The Location Maps are included herein as the following attachments:

- Attachment 2.04 - Administrative Boundaries
- Attachment 2.05 - Property within the Project Footprint
- Attachment 2.06 - Property within 500ft of the Project Footprint
- Attachment 2.07 - Property List within 500ft of the Project Footprint (a table including all parcel and landowner information, obtained from Sedgwick County on April 18, 2024)

Project Photos

Photos of the Project Site and a map of photo points are included herein as Attachment 2.08.

Site Plan

The site plan is included herein under Attachment 2.09. Though the site plan shows the maximum permitted three hundred ten (310) turbine locations, the site plan provided at the time of submittal of the Application is preliminary only and is likely to change prior to construction. There are numerous factors that impact the Project layout and siting plan, many of which are finalized through studies, reports, and feedback closer to the Project construction date. Finalizing the variables to settle on a final

layout requires certainty that is provided by the approval of the Application, so any layout provided at this stage of development can only be indicative and for preliminary reference only. Prior to submitting building permit applications and prior to construction, OPE will provide the County staff, along with the necessary emergency management and response teams, with a final site plan containing all Project infrastructure.

Wind Turbine Technology

Though the Project does not have a turbine supply agreement in place, it is currently modelled utilizing a Vestas V163 4.5MW/104hh turbine, with the final layout and turbine count subject to change depending on the final turbine model selected. The current site plan has been designed with primary turbines locations as well as alternate turbines to accommodate final environmental, engineering, and site-specific feedback, final discussions with landowners, and Federal Aviation Administration (“FAA”) continuing hazard determinations.

Photographs of typical installations of the Vestas V163 4.5MW/104hh turbine are included herein as Attachment 2.10. See Table C below for turbine component dimensions of the Vestas V163 4.5MW/104hh.

Table C: Turbine Component Dimensions of the Vestas V163 4.5MW/104hh

Turbine Component	meters	Feet
Tower Hub Height	104	341
Rotor Diameter	163	535
Maximum Tower Height	185.5	608.6
Nacelle Height Installed	8.4	27.6
Nacelle Length Installed	12.96	42.5
Nacelle Width Installed	3.98	13.1

While the Project is currently being modelled with the V163 4.5MW turbine discussed above, the final choice of appropriate turbine technology utilized in the Project is dependent on a final executed turbine supply agreement, which, in its turn, is dependent on the approval of the Application by Sedgwick County. Technical drawings of individual turbine technology are proprietary and will not be available until execution of the turbine supply agreement.

Phasing of Development

At the time of this Application, the Project has commercial offtake for 400MW and is planning for a construction schedule to meet a September 15, 2027 COD. Subsequent construction phases for the remaining wind turbine locations will depend on the commercial offtake and interconnection opportunities. Each phase may require an independent substation, operations and maintenance building, and interconnection agreement.

Table D below provides the current assumptions for the Project phasing tentative schedules. Future scheduling of access to the Project Site, aligned with executed offtake agreements differing from

current expectations, may necessitate alternate phasing, accelerated phasing, or elimination of phasing altogether. OPE will continue to update the Project phasing schedule as the offtake and interconnection opportunities evolve relative to the Project. OPE will notify the County of any potential deviance from the proposed Project phasing schedule.

Table D: Project Phasing Schedule

<i>Construction Phase</i>	<i>Tentative Capacity</i>	<i>Tentative COD Date</i>
Phase 1	Approx. 400-425 MW and approx. 89-103 turbines	09-15-27
Phase 2	Approx. 400-425 MW and approx. 89-103 turbines	12-31-28
Phase 3	Approx. 400-425 MW and approx. 89-103 turbines	12-31-28

Project Phase Assignment

As part of OPE’s phasing, OPE anticipates forming, together with its investors, separate, special purpose affiliate entities that are controlled by, controlling, or under common control with OPE (each, an “Affiliate”) to develop, own and/or operate all or a portion of the Project and Project Site. OPE may also desire to transfer all or a portion of the Project and Project Site to unaffiliated third parties, including but not limited to a public utility. One or more assignments of the special use permit as to all or any portion of the Project and Project Site may be required in connection with the foregoing activities.

As part of this Application, OPE requests the right to assign the special use permit as to all or any portion of the Project and Project Site to an Affiliate or any unaffiliated third-party without the need to obtain consent from the Sedgwick County, as long as written notice of the assignment is provided to the County no later than 10 days after such assignment containing the name and address of the successor/assignee.

Collection Easement Corridors

As discussed above, the final site plan for the Project cannot be determined until closer to the construction date. However, all turbines associated with the Project will be sited on land currently subject to a land lease and wind easement, renewable energy participation agreements, or underground collection easements, as listed in Attachment 2.01 and as depicted in Attachment 2.05. Once the final turbine layout has been determined, OPE’s team of engineers will optimize the final access roads design to minimize new road construction and will optimize the final underground collection cabling design to minimize excess cable length. This optimization minimizes the impact on the participating landowners and the overall impact on the land.

During the process of optimizing the Project site plan, OPE may identify new land corridors for collection lines. Collection line easements or access easements outside the Project Site that may become

necessary to serve the Project are permitted so long as OPE provides evidence of such easements to the County prior to issuance of any building permits for the Project.

Utility and/or Transmission Interconnection

While multiple potential Points of Interconnection (“POI”) to existing transmission infrastructure are available in and near the Project Site, identification of the final POI location is still in progress. OPE continues to evaluate the viability of multiple POI’s and to perform formal injection/grid studies for each potential offtake and injection solution.

The final determination of a POI will depend on a combination of forthcoming offtake agreements and continuing injection/grid studies. All potential injection/grid studies, the final choice of POI, and an executed power purchase agreement are reliant on the approval of this Application.

Geotechnical Report

A preliminary desktop geohazard report for the Project Site and surrounding areas was completed on February 22, 2023, and updated on May 30, 2024 and is included herein as Attachment 2.11. Supporting geotechnical information in the form of a Project-specific soils overview and map series is further referenced below and included herein as Attachment 5.05.

Further geotechnical studies, including field bores, continuing materials testing in state-authorized lab(s), and additional geotechnical reports will be performed as the final turbine technology is contracted, FAA hazard studies and other continuing site studies completed, and final turbine layout determined.

A final geotechnical report will include the following, and will be performed subsequent to Application approval and prior to start of construction:

- Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing
- Foundation design criteria for all proposed structures
- Slope stability analysis
- and grading criteria for ground preparation, cuts and fills, and soil compaction

Notice to Federal Aviation Administration

The FAA is the regulatory authority for all U.S. airspace, and because wind turbines are structures over 200 feet Above Ground Level (“AGL”), the Project will follow requirements for the completion of a Form 7460-1 (Notice of Proposed Construction or Alteration) for each final turbine location. Upon receiving Determinations of No Hazard (“DNH”) for each location, OPE must file the 7460-2 construction notice filing with FAA, just prior to construction.



As a step of early due diligence, OPE filed proposed turbine locations with the FAA in the fall of 2021. After coordination with the FAA, OPE received DNHs for the preliminary site plan, which provides a high level of certainty that new proposed turbine locations in this area will meet the standards for FAA approval.

Updated turbine locations were filed with the FAA in January 2024. As the Project Site has gone through the FAA clearinghouse as part of the preliminary site plan, it is expected that the FAA will not have objections to the tower locations and will issue new DNHs in June of 2024. Additionally, OPE will submit the final turbine locations of each Project phase once final turbine siting is complete for the final FAA review. As with the previous filings, existing DNHs ensure approval for each site is likely.

Notice to Operation of Communication Link

An updated microwave study for the Project Site and surrounding areas was completed on December 19, 2023, and is included herein as Attachment 2.12. This study is an update on the original microwave study from October 4, 2022 that was provided in the 2023 Application. The resulting study data specific to existing signal paths and above-ground microwave communication infrastructure is being used to calculate and revise microwave setback buffers for all turbine locations within the Project. Continued microwave studies will be completed as the final turbine technology is contracted and the FAA hazard studies, and other continuing site studies are completed. Currently, the modelled turbine setback from existing microwave paths is 55 feet, per current industry standards.

A notice to known communication link entities was performed on May 30, 2024, and included all communication parties listed and included herein as Attachment 2.13. Such notice and ongoing concurrent communication consultation will be performed periodically as the Project progresses through development and construction, and again as it reaches COD.

In addition, prior to construction, OPE will also obtain a clearance letter from the National Telecommunication Information Administration (“NTIA”). OPE will update the Sedgwick County staff with all communication notice updates and NTIA updates as they occur.

Notice to Mineral Estate Owners

Mineral estate owner notification was completed for the 2023 Application. For this Application, mineral estate owner notification will be given again, as required by Colorado law, and will be completed no less than thirty days before the date of the initial public hearing for the Application.

Decommissioning Plan

A preliminary decommissioning plan, included herein as Attachment 2.14, is based on the draft decommissioning plan included in the 2023 Application. It has been updated by a licensed third-party engineer and reflects feedback from the Sedgwick County Planning Department. Industry standards for decommissioning plans typically require that a portion of the financial security during the 15th year of operations be submitted so that there will be dedicated funds available to use for the full project decommissioning. The reason that only partial financial security is required 15 years into operations is

because the resale and salvage value of a project less than 15 years old almost always exceeds the third-party cost estimate to decommission a project.

OPE has voluntarily elected to post partial financial security prior to construction so that there are additional assurances and protections to decommission the Project. A final decommissioning plan will be completed by a licensed third-party engineer as the Project reaches construction-readiness and after all County decommissioning and financial security consultation has been successfully completed and/or all applicable County agreements have been executed. The final decommissioning plan will be completed and submitted to the County prior to issuing building permits and starting construction.

Proof of Liability Insurance

Proof of liability insurance in the form of a certificate of liability insurance with limits of at least \$1 million per occurrence and \$1 million in the aggregate is included herein as Attachment 2.15.

Third-Party Certifications

Third-party certifications for all equipment will be available upon request as equipment and/or technology is contracted and subsequent to Application approval.

Section 3: Request for Conditional Approval

Several late-stage development tasks included herein as requirements for approval in Section 2, or optional studies included in Section 5, remain preliminary until the final design and engineering has been completed. Within this Application, OPE has included as much information as can be reasonably determined at the time of submittal, but some information will remain preliminary prior to Application approval. As a result, OPE requests approval of the Application, subject to the following conditions (the "Conditions of Approval"):

1. OPE shall provide the County with:
 - a. Evidence of an executed turbine supply agreement
 - b. A final geotechnical report
 - c. Definitive injection/grid studies
 - d. Applicable third-party certifications
 - e. Updated reports or designs according to any changes to the final site plan
 - f. Evidence that the water and wastewater supply is adequate to serve the Project and compliant with state standards
2. OPE shall increase the setback of any wind turbine from an inhabited structure located outside the Project Site boundary, including a residence, school, hospital, church, or public library, by 500 feet, to 2 times the height of the wind turbine or 2,500 feet from the property line, whichever is greater.
3. OPE shall provide an updated decommissioning plan to the County with the final quantity of wind turbines in the Project, prior to construction.
4. All vehicles (excluding emergency vehicles) accessing the Project shall observe County road speed limits.
5. All construction debris (including concrete truck clean out) and trash shall not be buried nor

burned on the Project Site but must be disposed of at a properly permitted landfill on a regular basis. Suitable containers and dumpsters shall be utilized to prevent the debris from becoming wind-blown.

6. All reclamation materials including native seed mixtures, mulch, and erosion control materials shall be certified as weed free.
7. OPE shall, to the extent required by Colorado law, reasonably accommodate access to and development of subsurface mineral interests with respect to its use of the Project Site for the Project. Prior to issuance of any building permits, OPE shall demonstrate to the County that it has entered into, or made good faith and commercially reasonable efforts to enter into, surface use agreements or other compatible development agreements with mineral estate owners who have filed timely objections to the Application pursuant to Colorado statutes.
8. Prior to the issuance of any building permits, OPE shall pay to the County fees owed pursuant to the County's Land Use Regulations and adopted fee schedule and reimbursement amounts that may be due pursuant to an agreement to be negotiated between the County and OPE wherein OPE agrees to reimburse the County for actual expenses related to its review and/or third-party consultant review of the Application.
9. Collection line easements or access easements outside the Project Site that may become necessary to serve the Project are permitted so long as OPE provides evidence of such easements to the County prior to issuance of any building permits for the Project.
10. OPE shall have the right to assign the special use permit as to all or any portion of the Project and Project Site to an affiliate or any unaffiliated third-party without the need to obtain consent from the County, so long as written notice of the assignment is provided to the County no later than ten (10) days after such assignment containing the name and address of the assignee.
11. OPE shall apply for a grading or building permit within three (3) years from the effective date of the resolution approving this Application with the possibility of one (1) additional extension upon a showing of good cause why a grading or building permit has not been issued. If OPE fails to apply for a grading or building permit within such time period, as may be extended, the approval shall expire, and a new special use permit application will be required. So long as OPE applies for either a grading or building permit in such time frame contemplated herein, the Application approval shall be valid for the useful life of the Project.

Section 4: Request for Reduction of Setback

As approved for the 2023 Permit, OPE requests the same reduction of setback through the County setback reduction process described in Section 13-105.C.3.d of the County's Comprehensive Plan and Zoning Ordinance described below in Table E.

Table E: Proposal for Reduction of Setback

	Sedgwick County "Minimum Setback" per Section 13-105.C.3	Reduction of Setback Request
Setback of Wind Turbine from above-ground public electric power lines or communication lines	2 times system height	1.5 times system height
Setback of Wind Turbine from public road or highway or railroad	2 times system height	1.5 times system height
Setback of Wind Turbine from public road or highway with ADT of 7,000 or more	2 times system height or 420 feet, whichever is greater	1.5 times system height or 420 feet, whichever is greater.
Setback of Wind Turbine from an inhabited structure located on-site , including residence, school, hospital, church or public library.	2 times system height, or 1000 feet, whichever is greater	(2 times system height, or 1,500 feet, whichever is greater – see Note 1)
Setback of Wind Turbine from an inhabited structure located outside the site boundary , including residence, school, hospital, church or public library.	2 times the system height or 2000 feet from the property line, whichever is greater	
Setback from all other property lines, unless appropriate easements are secured from adjacent property owners or other acceptable mitigation is approved by the Board	2 times system height or 1000 feet, whichever is greater	1.5 times system height or 1000 feet, whichever is greater.
(1) While this 1,500' setback is greater than what is currently required, a 1,500' setback from an inhabited structure on participating property ("on-site") is the standard internal setback OPE uses across all wind projects.		
(2) OPE's agreement to increase the County residential setback from 2x the system height or 2,000', whichever is greater, to 2x the system height or 2,500' is an adequate compromise for		

the County's findings that OPE's request for reductions meet the County's criteria for approving the same.

For the following reasons, the proposed reduction of setback, A) is justified; B) does not increase the impact on the public health, safety, welfare, and the environment, and C) otherwise complies with the relevant standards:

- 1) The reduction of setback increases the efficiency of the Project by allowing more optimum turbine spacing and/or layout. As turbine spacing and/or layout are further refined, output is increased, thereby increasing net generation, and increasing net financial impact to County and landowners.
- 2) The price of energy will decrease as a result of increased efficiency, making the Project more attractive within the open energy market, increasing the Project's likelihood of eventual overall success.
- 3) The reduction of setback better fits standard industry setbacks, which, in turn minimizes impacts on agricultural land profiles/percentages in this region. Specifically, by increasing our ability to site turbines in locations closer to existing roads and property lines, interior road lengths will decrease by approximately 25% and underground cabling lengths will decrease by at least 25% overall; thereby reducing the need for reclamation and re-seeding, further protecting uncultivated native grasses and minimizing the need for weed mitigation.
- 4) The reduction of setback will minimize impacts to individual agricultural operations, both during construction and during ongoing operations and maintenance.
- 5) OPE performs and will continue to perform ongoing in-depth study of impacts to the public health, safety, welfare, and the environment. In every aspect of study, analysis and due diligence, there is no change to the impacts to the public health, safety, welfare, and the environment as a result of the reduction of setback.
- 6) In all other aspects of this submittal, the reduction of setback continues to otherwise comply with relevant standards.
- 7) Most importantly, the reduction of setback comes as a direct result of ongoing conversations with affected landowners and from direct requests from affected landowners to minimize the effects of construction and operations on individual private property rights. Sedgwick County landowners have asked OPE to request a reduction of setback with this Application, specifically as the setback reductions relate to the reduction of internal road lengths, minimizing the use of and impact to County road infrastructure and minimizing the use of agricultural land.

Section 5: Additional Application Support Materials

Project Studies Matrix

An ongoing “Project Studies Matrix” demonstrating continuing and expected Project studies is shown in Table F below. OPE will continue to perform pertinent and prudent Project-related studies as applicable, and all studies necessary for completion of any Sedgwick County permit process will be completed prior to approval of any building permit and prior to the start of construction.

Table F: Project Studies Matrix

Environmental Study	Study Status Summary	Related Agency	Estimated Timing
Tier I Critical Issues Analysis	Regional study to guide site selection and identify key issues for siting of infrastructure. No specific item of concern identified.	USFWS	Complete
Tier II Site Characterization Study	Site-specific study of listed species and habitat potential, no species of concern based on traditional design considerations and setbacks.	USFWS/CPW	Complete
Tier III General Avian Survey and Eagle Point Counts	No species of concern noted to date based on traditional design considerations and setbacks.	USFWS /CPW	Complete
Sage Grouse Lek Survey	Two aerial lek surveys were completed, one in 2022 and one in 2023. Greater Prairie Chicken leks were recorded within Project boundaries and within a 2.2-mile buffer during spring 2022 and 2023 surveys. OPE is in communication with Colorado Parks and Wildlife regarding the active leks within the Project.	CPW	Complete
Raptor Nest Survey	Two aerial raptor surveys were completed, one in 2022 and one in 2023. One active bald eagle nest was observed within the Project’s 2-mile buffer during the spring 2022 survey. Numerous raptor nests were observed	USFWS /CPW	Complete

	within and around the Project area. None are likely to impact the Project based on traditional design considerations and setbacks, but OPE is in communication with US Fish and Wildlife Services regarding the surveys.		
Prairie Dog Assessment	Remote study has identified potential colonies across the Project footprint. Field studies will be undertaken ahead of construction to verify status and potential for burrowing owl presence.	CPW	Initial survey complete. Additional field studies to be conducted prior to construction start.
Wetland Delineation	Desktop delineation complete to guide site design. Field delineation will be conducted within construction corridors and areas of disturbance.	U.S. Army Corps of Engineers	Desktop reports are complete. Additional field delineation to be conducted prior to construction start.
Site Setback and Buildable Area Assessment	Various setback requirements compiled into GIS to develop buildable areas within the site footprint.	Various	Complete
Communication Systems Interference Study	Microwave communication facilities and corresponding beam paths have been identified within the Project footprint and incorporated into the design for avoidance.	County	Complete
FAA Study	Turbine location studies have been submitted to FAA for review. Determination of No Hazard expected for all turbine locations.	FAA	Preliminary filings completed with additional filings prior to construction.
Cultural Resources	Desktop study indicates no significant recorded sites within the Project footprint. Field studies will be completed in final construction corridors or disturbance areas.	OAHP	Desktop reports complete. Additional field studies will be conducted prior

			to construction start.
Shadow Flicker Modeling	Turbine locations have been modeled for potential shadow flicker at receptors within and near the Project boundary. No receptors will be subject to unusual shadow flicker based on industry standards.	County	Complete
Sound Modeling	Turbine locations have been modeled for potential sound levels at receptors within and near the Project boundary. No receptors will be subject to unusual sound levels based on industry standards.	County	Complete
Acoustic Bat Survey	An acoustic bat monitoring was completed in January 2024 to study the presence of listed or potentially listed bat species. No listed bat species were detected within the Project boundary and OPE is currently reviewing the report with USFWS.	USFWS/CPW	Complete

Additional Maps

Additional supportive informational maps are included herein as attachments which are listed in Table D below:

Table F: Additional Maps

Land Cover Map	Attachment 5.01
Water Resources Map Series	Attachment 5.02
Biological Resources and Public Lands Overview Map	Attachment 5.03
Regional Infrastructure Overview Map	Attachment 5.04
Soils Map Series	Attachment 5.05

Impact Analysis

The construction and operation of any wind farm carries the opportunity cost of small amounts of land that were previously used for crops or grazing and will instead host wind facilities for the operating life of the Project. The exact area of land use for each part of the Project will vary, but generally a single

turbine, including the corresponding access road, will cover a half-acre of land. In these small portions of private property where wind facilities will be constructed, the land use will change from having historically been used for crops or grazing, to being used for wind energy generation during the operation of the Project. The substitute impact of land use is mitigated between OPE and the property owner in two ways: compensation and reclamation. Fair compensation for OPE's use of private property during operations is the foundation of the land lease and wind easement agreements signed between landowners and OPE. Fair compensation in these agreements covers direct impacts, such as crop damage, which result from the use of the property for the Project, mostly during construction. Restoration of the areas where wind facilities were located, which shall occur during construction, throughout operations, and during the decommissioning of the Project, is performed to mitigate against further potential impacts that could result from impacts within the Project Site.

Numerous studies, surveys, and due diligence have been ongoing for years in the proposed Project Site. Their purpose is ultimately to inform an optimized site design which minimizes potential impacts to the surrounding environment. In 2021, a Critical Issues Analysis ("CIA") was completed by Westwood Professional Services. The purpose of the CIA was to determine whether any major concerns (including hydrological, biological, cultural, archaeological, historical, land use) were present on the proposed Project Site. No major concerns were discovered during the research creating the CIA. Additionally, the CIA provided a guideline on what additional studies and surveys should be conducted in the footprint. Aerial species-specific surveys were completed in March 2022. The aerial surveys were conducted to determine the presence of any leks for the Greater Prairie Chicken and the Sharp-tailed Grouse, and the presence of any raptor nests (while also determining the species the nest belongs to). The results of every study and survey completed within the Project footprint add additional clarity and confidence to future site design. The ongoing and final design of the Project takes into consideration the potential impacts to wildlife, geology, water features, air and water quality, erosion, plant species (weeds), wetlands, the acoustic environment, light and shadow, and the overall environment.

The Project will have a visual impact. To the extent practical, OPE will design the Project to minimize this impact. The use of ADLS or light mitigating technology for reducing the frequency of lighting the turbines at night is the primary visual impact mitigation of the Project. OPE is currently reviewing the preliminary Project site plan with multiple ADLS vendors to ensure the best possible solution will be installed to mitigate the visual impact to the greatest extent possible. The final lighting plan used by the Project will require FAA approval.

The construction of the Project has the potential to impact the surrounding environment, primarily through the transportation of equipment and use of public roads. The public improvements agreement between OPE and the County will mitigate the impacts to County roads. Deciding which roads to use, when to use them so disruptions to traffic can be reduced, and the plan for maintaining and repairing the roads to be used, are all key strategies to managing the construction impact of the Project.

Use of County Road Right of Way and Road Use Agreements/Permits

Prior to the issuance of building permits for all applicable Project components, and prior to construction start or substantial movement of Project components across or along Sedgwick County roads, OPE will enter into agreements with the County, such as public improvement agreements, road use agreements,

road crossing agreements, or development agreements, sufficient to address the construction and ongoing operation of the Project to protect the health, safety, and welfare of the public.

OPE has met with Sedgwick County Road and Bridge staff to introduce the Project, the potential timelines, and potential impacts to County roads. Feedback from Sedgwick County staff will be incorporated into the applicable agreements with the County. As they correspond specifically to Sedgwick County roads and Sedgwick County regulations, all applicable County road use agreements and permits between Sedgwick County and OPE may include, but are not limited to, the following County road use requirements and commitments:

- Use of County roads by OPE for delivery of Project components and for continuing operations.
- Temporary and permanent alteration of the County roads for the delivery of components, equipment, and personnel, etc.
- Restoration by OPE of County roads to original or better condition.
- Roadway construction and materials subject to Sedgwick County road and bridge regulations, if applicable, and other state and federal standards.
- OPE commitment to avoid traffic safety hazards; OPE will use recognized safety compliant standards at times when traffic control is required.
- During construction, OPE will create temporarily enlarged access points to accommodate large truck entrance and exit from the Project.
- OPE will construct parking and loading zones properly surfaced and constructed with drainage and keeping soil erosion issues as a priority.
- Undue impacts caused by OPE's Project will be mitigated through road improvements made by OPE proportionate to the impacts as required by the Sedgwick County Road and Bridge Department.
- Underground cabling in the County road right of way shall be installed according to Sedgwick Section 13-105.C.7 (Underground Location of Powerlines).
- OPE shall return disturbed areas to as nearly as possible their original condition prior to construction.
- OPE shall complete all necessary backfilling, tamping, and packing requirements.
- Applicant shall work closely with the Sedgwick County Road and Bridge Department to ensure all local, state, and federal safety measurements are fulfilled.
- Wherever possible, road crossings will be planned and constructed perpendicular to the County roadway.
- OPE shall provide 'as built' drawings of each County roadway project subsequent to construction completion.

Internal Access Roads

During the final engineering phase, prior to building permit approvals and prior to the start of construction, OPE will provide Sedgwick County with maps displaying interior access road locations for ingress/egress to all Project infrastructure not accessed by public roadway. Interior access roads will remain for the operating life of the Project and are planned to be approximately fifteen (15) feet in width, not to exceed twenty (20) feet in width, constructed of gravel or rock materials as recognized by locally

accepted private road construction standards. OPE will work with the County to ensure access road entrance locations are sited to ensure safest possible design.

Interior access roads shall be maintained in a safe usable condition. In addition, interior access roads shall be maintained in response to weather events such as heavy rain or snow to keep the roads in a safely usable condition for maintenance, operations, and landowner/partner use. Interior access roads will be subject to the Project's final dust and weed mitigation plans as described below.

Dust Mitigation Plan

OPE shall design a dust mitigation plan with Sedgwick County, sufficient to address the construction and ongoing operation of the Project, and the health, welfare, and safety of the public.

Weed Mitigation Plan

OPE shall make a commercially reasonable effort to control all weeds on or within a four-foot radius of interior access roads to prevent the growth of weeds as well as the maturation/spread of seeds from such weeds or any uncultivated plants in the area. OPE shall prepare a weed mitigation plan which shall be delivered to Sedgwick County prior to issuance of any building permit.

Erosion, Sedimentation, Stormwater Discharge, Air Quality, and Floodplain Analysis

Once the Project design is finalized, a grading plan will be developed. After analyzing the current grade of the Project Site, it will be determined if additional grading will be necessary for the construction of any turbine and/or Project Site. In situations where grading is necessary, a plan of proposed grading will be provided to Sedgwick County pursuant to County regulations, prior to issuance of a building permit, and prior to start of construction.

Light Mitigating Technologies

Per current Colorado Revised Statute, the Project includes the installation, construction, and ongoing operation of light mitigating technologies, such as ADLS described below, or a similarly mitigative night lighting solution.

ADLS is a ground-mounted radar system located within and/or around a wind energy project. The purpose of the ADLS system is to detect nearby aircraft and turn the lighting system on during nighttime hours or during low-light conditions and as aircraft approach, enter, and leave the vicinity of the turbines. ADLS is utilized to minimize the night lighting effects from typical continuous night lighting, while continuing to maintain the aviation safety levels and FAA regulations for safe/continuous night flight. ADLS lights are initiated if aircraft are detected within 30 miles of a turbine. Each system is designed to fit the topography, number of turbines, and outlying FAA facilities near the wind project. If no aircraft are detected, the lighting remains off. Per FAA requirements, in the event the ADLS system has been disabled due to a power outage, equipment failure, or similar occurrence, the night lighting remains on continuously until the power has been restored, or equipment repaired.



An ADLS system consists of one or more radar towers under 200 feet (AGL), support structures, and electrical transformer(s), which are connected to each turbine via underground electrical cabling. The specific ADLS system and system location for the Project is dependent on several varying factors, most importantly the pending FAA hazard determinations for the planned turbine array. In addition, the ADLS facilities themselves require additional FAA oversight and permitting.

OPE is currently reviewing a preliminary site plan with multiple nationally recognized and experienced light mitigation technology contractors licensed to provide light mitigation technology solutions in Colorado. As the system is engineered and the final technology plan becomes available, OPE will provide all required information to meet the County's Land Use Regulations related to light mitigating technologies. The final Project lighting plan will need to be approved by the FAA.

Facility Appearance

In compliance with the FAA regulations in wind turbines and standard design practices, all turbines in the Project shall be painted a neutral, non-reflective color. To the extent possible given availability of materials and design requirements, any accessory, maintenance, or other building built as a part of the Project shall use materials, colors, textures, screening, and landscaping to blend into the existing environment.

Water and Wastewater Systems

The Project's construction and operation includes the sourcing and/or ongoing use of water for operations and maintenance purposes including, but not limited to, use of potable water at all operations facilities, dust mitigation, weed mitigation, restoration, construction, road use, and fire mitigation. At the time of Application submittal, a potential source for water of any type has not been identified, studied, determined, or permitted. OPE will work closely with external environmental and legal teams and pertinent state and local jurisdictions to complete the applicable sourcing and permitting of all water used for the Project.

The Project includes the engineering, installation, construction, and ongoing operation of one or more commercial On-Site Wastewater Treatment Systems ("OWTS"), associated with the ongoing operations and safety of the Project and associated structures.

Contact has been initiated with the Northern Colorado Health Department ("NCHD"), which oversees the permitting process for all commercial OWTS located within Sedgwick County. The OWTS permitting process with NCHD was initiated January 20, 2023. Final OWTS design, engineering, and permitting is expected to be initiated prior to construction.

Section 6: Attachments

Table G: Attachments

Attachment Number	Attachment Title
Attachment 1.01	Resolution No. 2023-027
Attachment 1.02	Letters of Support
Attachment 2.01	Parcels of Vested Landowners within the Project Site
Attachment 2.02	Executed Agent Authorizations
Attachment 2.03	Land Lease and Wind Easement (redacted)
Attachment 2.04	Location Map 1 – Administrative Boundaries
Attachment 2.05	Location Map 2 – Property within Project Site
Attachment 2.06	Location Map 3 – Property within 500 Feet
Attachment 2.07	Property within 500 Feet of Project Site
Attachment 2.08	Photo Points Map and Project Photos
Attachment 2.09	Site Plan – Overview and Map Book
Attachment 2.10	Turbine Photo: Vestas v163 4.5MW
Attachment 2.11	Desktop Geohazard Report
Attachment 2.12	Comsearch Microwave Study
Attachment 2.13	List of known Communication Link Entities
Attachment 2.14	Preliminary Decommissioning Plan
Attachment 2.15	Proof of Liability Insurance
Attachment 5.01	Land Cover Map
Attachment 5.02	Water Resources Overview and Map Series
Attachment 5.03	Biological Resources and Public Lands Overview Map
Attachment 5.04	Existing Infrastructure Map
Attachment 5.05	Soils Overview and Map Series