

NOTE: WILL BE Chapter 3 Section 3.19 of the Coconino County Zoning Ordinance

1.1 Utility Scale Renewable Energy Systems

1.1.A. Purpose

1. The purpose of this Section is to establish a process, rules, and standards for the construction, siting and operation of Utility-Scale Renewable Energy Systems in order to:
 - A. Give County residents, leaders, staff, and developers clear direction on the appropriate siting of Utility-Scale Renewable Energy Projects while considering unique permitting conditions for each site and type of utility, and
 - B. Promote reliable, clean energy sources by providing clear standards to encourage Utility Scale Renewable Energy Systems that:
 - i. preserve the County's highly valued, intact natural landscapes and private lands from fragmentation,
 - ii. offer private landholders options for economic diversity and stability,
 - iii. mitigate climate change impacts, and
 - iv. maintain and protect wildlife populations and corridors, viewsheds, vegetative communities, dark skies, air quality, and natural quiet, and
 - C. Support projects that provide clear benefits to the County, such as revenue generation, job creation, economic, and environmental benefits.

1.1.B. Applicability

Utility-Scale Renewable Energy Systems located in any zoning district require the granting of a Conditional Use permit by the Planning and Zoning Commission. Utility-Scale Renewable Energy Systems include Solar Energy Installations, Wind Energy Installations, and Biomass Energy Installations. These facilities are permitted as a type of Utility Facility.

1.1.C. Preferred Facility and Location Criteria for Utility Scale Renewable Energy Systems

1. Preferred Installations. New installations shall use the preferred facility type and location criteria where feasible. Site location and development of installations shall minimize negative impacts to the existing character of the surrounding landscape and / or community. Preferred criteria are intended to guide decisions about the location and siting of Utility Scale Renewable Energy Installations and are not intended to exclude sites that may simultaneously meet disfavored facility criteria.
 - A. Preferred criteria for all Installations:
 - i. A project site that has minimal visual impact on a **Visual Resource**, or that is more than 10 miles from a Visual Resource.
 - ii. A project site that uses or is near to existing substations, transmission lines, or points of interconnection.

- iii. Projects sites that are on previously disturbed land such as brownfield sites, mining sites, sites with low wildlife habitat and vegetation value, or with few cultural resources.
 - iv. Project sites that retain current and traditional land uses, and allow multiple uses of the land such as ranching, agricultural, and recreational uses, are preferred over single-use projects.
 - v. Projects using water conservation methods or reclaimed water are preferred over water-intensive systems.
- B. Additional preferred criteria for Biomass Energy Installations:**
- i. Sites that use an existing **Utility Facility**, or adaptively reuse existing industrial sites.
 - ii. Sites that are located near major highway, transportation routes, or railway lines.
 - iii. Projects that directly support local forest management by utilizing locally produced or harvested forest feedstock or by-product from the Four Forest Restoration Initiative footprint or similar projects, or forest feedstock harvested from waste streams within 150 miles of the facility.
- 2. Disfavored Facilities.** Disfavored facility sites may be permitted only if the applicant presents detailed evidence documenting that the facility will have minimal impact on the environment or that the site is more technically necessary than other locations. Disfavored siting criteria for new Utility Scale Renewable Energy Installations are intended to guide decisions about the location and siting of Utility Scale Renewable Energy Installations. The existence of preferred and disfavored criteria at a single potential facility site are not mutually exclusive. In instances where such co-occurrences exist, the County shall review the application narrative and weigh the presence of favored and disfavored elements to determine overall compliance with the objectives of this ordinance.
- A. For all Installations:**
- i. Sites that conflict with or have potential negative impacts on Special Status Species and their habitats, other special wildlife designations such as Critical Habitat and Important Bird Areas, Wildlife Linkages, riparian areas, and significant topographic features such as ridges.
 - ii. Any site that impacts eligible archaeological, cultural, and historic resources or sites, heritage areas, or cultural landscapes as formally identified by a designated tribal entity or government.
 - iii. Any site that requires significant ground disturbance and grading, such as new road construction that does not provide long term benefits to the property owner or community.
 - iv. Any site that would negatively impact or impair military operations, such as the release into the air any substance such as steam, dust and smoke, or that produces light emissions, glare or distracting lights that impact dark skies.
- B. Additional disfavored criteria for Wind Energy Installations:**
- i. Any site that includes a planned turbine location that is within one mile of **Non-participating** residential properties.
 - ii. Sites that may be a hazard to air navigation, as determined by the FAA.

- C. Additional disfavored criteria for Biomass Energy Installations:
 - i. Any site that is within seven (7) miles of the locations designated in Section 4.3.C.3.A of this ordinance, Lighting.

1.1.D. Preliminary Site Investigations for Utility Scale Renewable Energy Systems

1. Preliminary site investigations and inventories of the following resources shall be conducted to guide the project applicant and the County in determining the appropriate siting and design of an installation. The project applicant shall provide the following to the County during the Pre-Application review in addition to requirements of Section 5.2. Additional pre-construction and post-construction surveys may be required as a condition of the permit:
 - A. Preliminary habitat and wildlife evaluations. Preliminary desk top investigations shall identify potential wildlife issues by determining whether Special Status Species or their habitats may be present, and any other site-specific wildlife concerns. Preliminary site investigations will be of appropriate scope to effectively evaluate potential adverse issues. Appropriate state and federal wildlife-management agencies shall be consulted when conducting preliminary site investigations.
 - B. Preliminary desk top vegetation evaluations shall include identification of the presence of noxious weeds and Special-status Species.
 - C. Archaeological, cultural, and historic resource desk top evaluations and preliminary inventories. A site evaluation and preliminary desk-top inventory of on-site archaeological, cultural, and historic resources prepared by a qualified professional shall be conducted. A summary of communication and collaboration efforts, such as a pre-cultural on-site survey, with affected / potentially affected Native American tribes to evaluate cultural and historic resources or sites, heritage areas, or cultural landscapes shall be submitted with the application.
 - D. Preliminary Visual Resource site identification. Visual Resources and residentially zoned property located within 10 miles from the project boundary, or a distance as determined by the Director, shall be identified on a map showing the resource's relationship to and distance from the facility. This information will be used by County staff and the applicant to select the site locations and the number of viewpoints from which the visual impact analysis will be prepared.
 - E. Water resources. A survey of known water resources as identified in the Coconino County Comprehensive Plan Appendix C, Water Resources Appendix, both on site and adjacent to the site shall be prepared, and a statement as to impacts or use of those resources for the project shall be provided.
 - F. Lighting Plan. A preliminary exterior lighting plan shall be designed in coordination with the Naval Observatory Flagstaff Station and the County/City Dark Sky Compliance Specialist.
 - G. Preliminary Emissions Analysis in consultation with the Naval Observatory Flagstaff Station for Biomass Energy Facilities. The preliminary analysis shall identify the project location, technologies intended, and potential emissions/particulate components, and be of an appropriate scope to effectively evaluate potential adverse impacts to military operations and the community.

- H. A description of the current and traditional uses of the project site.
- I. Electronic files of the draft site plan, including the location of all equipment, fencing, transmission lines, substations, construction staging, and temporary and permanent roads, in either Computer-aided Design and Drafting (CADD) format, or compatible with Geographic Information System (GIS) software.

1.1.E. Performance Standards for Utility Scale Renewable Energy Systems

Due to the size, scale and complexity of Utility Scale Renewable Energy Installations, the following performance standards are in addition to applicable Performance Standards required throughout this Ordinance, unless otherwise noted.

1. **Sensitive Area Avoidance.** The site plan shall be designed to avoid sensitive areas and to reduce the likelihood of significant adverse effects on current and traditional uses and resources that are identified by the preliminary site evaluations and Pre-Application discussion. A sensitive area map shall be prepared to identify sensitive areas and features such as archaeological, cultural and historic resources or sites, heritage areas, or cultural landscapes, Visual Resources, plant and wildlife resources and habitats. Additional siting adjustments may be required as a condition of the permit.
2. **Vegetative Cover, Weeds, and Landscaping Requirements.** The project shall be planned and developed in a way that maintains the local ecosystem by minimizing grading and site disturbance and to maximize retention of native vegetation, topsoil, and landforms. Areas cleared during construction that are not needed for site operations shall be revegetated with native vegetative cover. A plan to control noxious weeds shall be required for the duration of the permit. Requirements of Section 4.4, Landscaping, do not apply to Utility Scale Renewable Energy Installations, unless specifically required for visual impact mitigation.
3. **Wildlife Management.** Arizona Game and Fish Department’s “Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona” (2012) and “Guidelines for Solar Development in Arizona” (2010), US Fish and Wildlife Service’s “Land-based Wind Energy Guidelines” (2012), or current editions, shall be consulted and design recommendations from these documents incorporated into applicable projects. Compliance with these guidelines shall be determined by USFWS, AGFD, and the County.
 - A. If the project is located within a Wildlife Linkage (as identified by the Coconino County Wildlife Connectivity Assessment, Arizona's Wildlife Linkages Assessment, or by Arizona Game and Fish Department), passage for those species that use the Wildlife Linkage shall be maintained.
4. **Stormwater Management.** The project shall be planned with low impact development stormwater management techniques, as outlined in the current version of the Coconino County Engineering Design and Construction Manual, to capture and infiltrate stormwater and rainwater. Biomass Energy Installations shall obtain a stormwater control permit for the facility, including materials stockpiles, from the Arizona Department of Environmental Quality. Additional stormwater controls may be required.
5. **Fencing.** Proposed fencing shall be designed to minimize visual impacts from and be complementary with scenic corridors and adjacent properties, and to minimize impacts to wildlife and Wildlife Linkages. Security fencing shall be permeable to small animals by leaving a six-inch gap between the bottom of the fence and the ground, exclusive of substation facilities. When feasible,

fencing shall be designed around groups or clusters of equipment, as opposed to fencing the entire site. New fencing shall not impact or impede existing easements to private, State, or public lands.

6. Audible Noise Limits. Audible noise impacts due to project operations shall not exceed the following standards, as measured from each wind turbine and other noise generating activity or infrastructure such as substations, inverters, and biomass facilities, to the property line of each adjacent **Non-participating** property, and to recreational facilities:

- A. Operational noise impacts shall not exceed 50 dBA. Compliance with this standard shall be demonstrated by a noise analysis prepared by a qualified expert as follows:

- i. Background Noise and Noise Forecasts. Sound levels shall be measured and analyzed to determine the baseline for forecasting operational project impacts. A forecast of the post-construction noise impacts shall be conducted to assess compliance with the maximum audible noise limit. The noise analysis shall consider facility aging and future modifications or technology changes.
- ii. Compliance Testing. Operational compliance testing shall be conducted to ensure that the facility meets the required or approved audible noise limit. Testing results shall be reported as required by Section 1.1.F.3.
- iii. Exceptions to noise impacts may be approved by the Planning and Zoning Commission when the applicant demonstrates a significant or substantive need to exceed the noise standards.

7. Setbacks, Height and Performance Standards Between Zones.

- A. For Wind Energy Installations.

- i. Turbines located within wind energy installations shall be set back from adjacent **Non-participating** properties by the following distances: the greater of the Turbine Total Height (as measured from the bottom of the turbine to the tip of the blade at full extension) times three (3) or ½ mile from the property line of any residential zone or Open Space zoning district; ¼ mile from other zoning districts, from State Lands, and public land that is not zoned. In addition, wind energy turbines shall be set back a distance equal to 110% of the Turbine Total Height from all overhead utility lines, public roads, trails, and public rights-of-way. All other non-turbine structures and buildings shall conform to the setback requirements for the zoning district in which the use or structure is located.
- ii. Height limits are not established for wind turbines, however, with the Conditional Use Permit the County may place reasonable limitations on turbine height if necessary to mitigate impacts to existing adjacent uses or if necessary to address impacts to public safety.
- iii. Exceptions to setbacks may be approved by the Planning and Zoning Commission if the County determines a modified setback is necessary to address impacts to existing adjacent uses, as allowed in Section 5.7.

- B. For Solar Energy Installations. All solar arrays and structures must comply with setback, building height, and performance standards between zones for the zoning district in which the system is located, unless the County determines a modified setback is necessary to address impacts to existing adjacent uses, as allowed in Section 5.7.

- C. For Biomass Energy Installations. All structures must comply with setback, building height, and performance standards between zones for the district in which the installation is located, unless the County determines a modified setback is necessary to address impacts to existing adjacent uses, as allowed in Section 5.7.
8. Visual Impact. Projects shall be designed to minimize visual impact by:
- A. Placing all collection lines within the installation underground, including connections to a substation, to the greatest extent practical. Exceptions may be approved by the Planning and Zoning Commission when the applicant demonstrates a significant or substantive need for above ground connections.
 - B. Mitigating visual impacts from transmission lines connecting substations to the utility grid to the greatest extent practical.
 - C. Designing and locating Wind Energy Installations in a manner to minimize adverse visual impacts. To the greatest extent feasible the system shall:
 - i. Use turbine towers of uniform design and color. The turbine color shall be a neutral color that blends with the environment and complies with FAA standards. Non-reflective gray, beige and white are recommended (unless future research identifies FAA-approved alternative colors to reduce bird impacts).
 - ii. Be screened by natural vegetation, topography, or other means to minimize potentially significant adverse visual impacts on neighboring residential areas.
 - D. Utilizing exterior light fixtures that comply with Section 4.3, Lighting. In addition, all exterior light fixtures will conform to, at minimum, Lighting Zone II standards unless located in a more restrictive Zone. Projects shall use the minimum lighting necessary for legally required building safety and security purposes.
 - E. Utilizing an FAA-approved radar-activation system for aviation-warning lights when aviation-warning lights are required on wind turbines by federal or state law. FAA-mandated warning lights are not required components of Section 4.3 lighting plan.
 - F. Using existing substations, or if new substations are needed, minimizing the number.
9. Signs. Signs shall be limited to those required for public or employee identification, safety, interpretive signs, or as otherwise required by law.
10. Roads and access. Existing roads shall be used to provide access to and throughout the site, or if new roads are constructed, the amount of land disturbance shall be minimized. Roads constructed to provide vehicle access for site and equipment maintenance shall be designed and constructed to standards approved by the Coconino County Community Development Engineering Supervisor and the local or nearest fire district, in coordination with the public safety, fire protection and emergency management plan.
- A. Grading and road construction permits are required under certain circumstances as described in the current version of the Coconino County Engineering Design and Construction Manual.
 - B. Measures to control and mitigate dust on roads shall be outlined in a dust control and mitigation plan.

11. Additional Performance Standards for Wind Energy Installations:

- A. Turbine towers, pad-mounted transformers and other structures shall be designed to reduce horizontal surfaces in order to limit perching or nesting activities by birds, and to avoid the creation of artificial habitat or shelter for raptor prey.
 - B. Guy wires for meteorological test towers shall only be used if necessary and shall contain bird diverters as recommended by Arizona Game and Fish Department or other appropriate state and federal natural resource management agencies.
 - C. Above-ground power lines shall comply with the Avian Power Line Interaction Committee standards to prevent avian fatality.
 - D. Safety and Shadow Flicker Nuisance. Turbine blades shall be designed so that the closest point of the sweep of the blade is at least 30 feet above finished grade. Shadow flicker from turbines shall not impact adjacent Non-participating properties or public rights of way by more than 30 hours per year, as shown by a shadow flicker evaluation prepared by a qualified expert. Exceptions to shadow flicker impact may be approved by the Planning and Zoning Commission when the applicant demonstrates a significant or substantive need to create impacts.
12. Air Quality Impacts for Biomass Energy Installations. Biomass energy installations shall obtain an air quality permit from the Arizona Department of Environmental Quality and adhere to all applicable Federal and State rules and regulations.

1.1.F. Permits and Administration for Utility Scale Renewable Energy Systems

- 1. Establishment of a **Utility Scale Renewable Energy System** shall require issuance of a **Conditional Use** permit as a type of **Utility Facility** in compliance with the provisions of **Section 5.7**.
- 2. Application Process and Requirements
 - A. In accordance with the requirements of Section 5.2, prior to the submittal of a **Conditional Use** permit application the applicant shall schedule a Pre-Application Review with staff of the Community Development Department, and additional experts if such assistance is determined by the Community Development Director. In addition to Section 5.3, Citizen Participation, the notification to property owners for the Neighborhood Community Meeting shall be a minimum of five (5) miles, or a distance determined by staff at the Pre-Application meeting, from the project boundary. The requirement for a Neighborhood Community Meeting may be waived by the Community Development Director.
 - B. In addition to requirements of **Section 5.7**, Conditional Use Permits, the following shall be provided:
 - i. Written narrative. The narrative submitted with the application shall include the following:
 - a. Why the proposed site has been chosen based on the preferred/disfavored criteria, and
 - b. How the facility provides clear economic and environmental benefits to the County, and
 - c. How the facility's design and operational procedures applies current best practices and technologies, and
 - d. A detailed description of the how project meets each of the required Performance Standards in Section 1.1.E., and

- e. Detailed results of the Preliminary Site Evaluations required in Section 1.1.D. For archaeological, cultural, and historic resource desk top evaluations and preliminary inventories, the narrative shall document how the site was inspected for culturally and historically significant resources and include the name and details of the professional(s) conducting the study, and
- f. Additional information requested at the Pre-Application review.
- ii. Electronic files of the final site plan, including the location of all equipment, fencing, transmission lines, substations, construction staging, and temporary and permanent roads, in either Computer-aided Design and Drafting (CADD) format, or compatible with Geographic Information System (GIS) software.
- iii. Architectural drawings shall include elevations of all proposed **Structures**, connection lines, electric energy storage units, equipment, and storage yards.
- iv. Visual Impact Analysis. A visual impact analysis of impacts to Visual Resources, cultural resources, and residentially zoned property located within 10 miles from the project boundary shall be provided, or at the distance determined by the Director at the Pre-Application meeting. The visual impact analysis shall demonstrate with photo simulations the true visual and Cumulative Impacts of the facility on the surrounding environment and include a written description of the impacts and proposed mitigation. The visual impact analysis shall utilize key observation point photographs taken from Visual Resources, cultural resources, and residential properties identified during the Pre-Application meeting to the proposed site location to create scaled photo simulations of the proposed facility from visually impacted locations. Scenic simulations shall illustrate the proposed facility including wind turbines, solar arrays, combustion and conversion units, Structures, substations, overhead transmission lines, and equipment facilities. The photos' locations shall be identified and labeled on a map demonstrating the visual line of sight from the resource to the facility.
- v. A traffic impact study or analysis may be required demonstrating how vehicles will access the site and describing the impacts of the proposed project on the local and regional road system during construction and operation. Traffic Studies are required under certain circumstances as described in Section 5.6 of the Engineering Design and Construction Manual.
- vi. A cultural resources management plan, based on the archaeological and historic resource studies, prepared by a qualified professional to protect and mitigate impacts to any known or discovered archaeological, historical or cultural sites or artifacts found on the site.
- vii. A public safety, fire protection and emergency management plan for construction and post construction operation of the facility, including plans for ongoing management of forest and fire fuels. Additional mitigation may be required if requested by the local or nearest fire district to support response capabilities.
- viii. A wildlife protection plan, based on the results of the Preliminary Site Evaluations, detailing how direct and Cumulative Impacts to wildlife, birds, bats, and Wildlife Linkages will be avoided through project design, and evaluation, monitoring, and mitigation strategies.

- ix. Notations summarizing permit conditions related to wildlife, such as timing restrictions and survey requirements, and instructions notifying operators how to proceed in the event cultural resources are encountered during construction or grading, shall be included on construction documents.
- x. Preliminary erosion control, site maintenance, noxious weed control and management, and native plant revegetation plans shall be submitted with the application. Prior to issuance of construction or grading permits final plans shall be submitted based on the permit requirements. The native plant revegetation plan shall address road shoulders and any areas disturbed by construction. The noxious weed plan shall include provisions for controlling and preventing the spread of noxious weeds during construction, throughout project operation and post operation restoration.
- xi. Compliance confirmation, lease agreements and Participating Property Owner documentation. Prior to issuance of construction or grading permits, the following approvals shall be confirmed: Decision document from a representative agency of the Federal Government if applicable, to include the US Environmental Protection Agency, Bureau of Land Management, US Army Corps of Engineers, approval of the Arizona Corporation Commission for the transmission line and the interconnect with the high voltage line, operating permits by the Arizona Department of Environmental Quality, if applicable, right of way and/or lease granted by the Arizona State Land Department for roads and turbine locations, if applicable, other lease agreements required to demonstrate legal authority for the facility, and confirmation of consent and agreement to siting impacts by Participating Property Owners.
- xii. Decommissioning Plan and Securities. Any utility scale renewable energy system that has reached the end of its useful life or has been abandoned shall be removed. A utility scale renewable energy system shall be considered abandoned when it fails to operate for 24 consecutive months. The decommissioning plan shall include but not be limited to the following:
 - a. Removal of all aboveground and underground equipment, structures, fencing, and foundations to a depth of three feet.
 - b. Removal, restoration, and revegetation of disturbed and graveled areas and access roads other than those identified by the property owner as being retained. Restoration shall include regrading and placement of like-kind topsoil and revegetation with native seed mixes and plant species, and yearly noxious weed monitoring and removal for three years after restoration is completed. The site shall be restored to its original condition within five years of decommissioning and removal of the project.
 - c. Remediation and disposal of any hazardous or toxic materials used, generated by or left on site by the Utility Scale Renewable Energy System.
 - d. Prior to the issuance of building permits for the project, the project owner/operator shall provide to the County a financial assurance bond that demonstrates the grantee financial ability sufficient to cover the cost of decommissioning the project. The bond shall ensure restoration of the land to its original condition, in an amount equal to the cost of decommissioning and to include the cost of inflation to the end of project, as estimated by a Professional Engineer registered in the State of Arizona. The financial

assurance shall be re-evaluated every five years to ensure that the estimate reflects current decommissioning costs as estimated by a Professional Engineer registered in the State of Arizona. The applicant shall bear all responsibility for assuring that the assurance bond is sufficient to cover the cost of decommissioning. The instrument shall be transferrable to cover the activities of any other entity which may have acquired the project prior to its decommissioning. Return of the financial assurance shall be subject to County verification that the site has been restored to its original condition within five years of decommissioning.

- C. **Modifications to Performance Standards.** The Planning and Zoning Commission may approve waivers to the performance standards in this Section for Audible Noise, underground placement of collection lines, and Shadow Flicker, in addition to the property development and performance standard waivers allowed in Section 5.7.B.4.B. In addition to addressing how the requested waiver meets the required findings, the applicant shall demonstrate a significant or substantive need for the waiver and provide detailed rationale for why the standards must be modified, the specific type and extent of the modification, and why the design cannot accommodate the affected standard.
 - D. Due to the complexity of the methodology or analysis required to review an application for a **Utility Scale Renewable Energy System Conditional Use** permit, the Director may require a technical review by a third-party expert. If a technical review is determined necessary the costs of this review shall be borne by the applicant, and shall be drawn from the total filing fee for the Conditional Use permit. The expert review may include, but is not limited to, the following:
 - i. The accuracy and completeness of the submissions;
 - ii. The applicability of analysis techniques and methodologies;
 - iii. The validity of conclusions reached;
 - iv. Whether the proposed Utility Scale Renewable Energy System complies with the applicable criteria set forth in these regulations; and
 - v. Other matters deemed by the Director to be relevant in determining whether a proposed Utility Scale Renewable Energy System complies with the provisions of these regulations.
3. **Compliance, Monitoring, and Mitigation Requirements for Utility Scale Renewable Energy Systems**
- A. Monitoring plans and compliance reporting shall be provided in yearly or other specific increments based on a reporting schedule required by the Conditional Use Permit requirements. Monitoring plans and compliance for post construction and operational impacts shall include but not be limited to wildlife (including birds and bats), sensitive plant species, noxious weed control, cultural resource protection, and audible noise limits. Modification of facility maintenance and operations may be required based upon impacts identified by monitoring reports, such as takings of listed species or an unanticipated mortality rate of birds or bats. The methodology of monitoring and compliance reporting shall be as determined by the Director.
 - i. Required modifications to the facility or facility operations shall be determined on a case by case basis and based on existing or new technologies shown to be effective at mitigating impacts. Changes to wind turbine operations shall limited to the minimum time necessary

to mitigate the impact, not to affect more than 0.05 percent of total annual Wind Facility Hours.

- B.** The County may require off-site mitigation of like kind and similar extent for projects creating impacts to wildlife and habitat.
- C.** Noncompliance with terms of the Conditional Use Permit shall be addressed as an enforcement matter under Section 5.7.B.12.

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AMENDMENT TO CHAPTER 5, SECTION 5.7.B.4.B

- A. The Commission may grant waivers from the Zoning Ordinance in conjunction with the approval of a **Conditional Use** permit for such property development standards and performance standards as: fences, walls, screening and **Landscaping**; **Site Area**, width, and depth; front, rear, and side **Setbacks**; Performance Standards Between Zones; **Lot Coverage**; height of structures; usable **Open Space**; signs; off-street parking facilities or parking lot standards; **Frontage** on a public street; number of **Persons** employed and/or the ratio of **Floor Area** of a **Cottage Industry**; **Campsite** in a residential zone **Density**, and audible noise, underground placement of collection lines, and Shadow Flicker associated with Utility Scale Renewable Energy Systems.

The Planning and Zoning Commission shall make the following findings before granting a waiver from the Zoning Ordinance:

- i. The proposed waiver will not be detrimental to health, safety, or general welfare of Persons living or working in the vicinity, to **Adjacent** property, to the neighborhood, or to the public in general;
- ii. The proposed Use otherwise conforms with the conditions, requirements, or standards of this Ordinance and any other applicable local, **State**, or federal requirements;
- iii. That the granting of the waiver is the minimum that will accomplish this purpose and will not constitute the granting of a special privilege inconsistent with the limitations on other properties in the same zone.

AMENDMENT TO CHAPTER 6, DEFINITIONS

Current and Proposed Zoning Code Definitions

BIOMASS ENERGY INSTALLATION shall mean a commercial facility that converts organic matter from forest products, known as biomass or feedstock, into electricity, heat, or transportation fuels (biofuels). A Biomass Energy Installation includes the combustion or conversion device and storage of biomass on-site.

CRITICAL HABITAT as defined in the Endangered Species Act, specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. These areas are delineated by the U.S. Fish and Wildlife Service.

CUMULATIVE IMPACTS shall mean the total effects from any existing or foreseeable future Utility Scale Renewable Energy project(s) on the fragmentation of Wildlife Linkages or habitat, or Visual Resources. Foreseeable future are projects that are approved, approved but not constructed, pending applications, and pre-applications requests.

DISTRIBUTED (INDIVIDUAL) RENEWABLE ENERGY SYSTEM shall mean a system designed to be accessory to an existing primary use, wherein electricity is generated in small amounts for primarily on-Site use. Examples may include but are not limited to roof or ground mounted detached or attached solar collectors, including vertical solar arrays attached to exterior building walls, reflectors and piping, apparatus needed for the operation of active solar energy systems, geothermal or other renewable energy systems, and Accessory Wind Energy Systems. 🌱

IMPORTANT BIRD AREA are areas identified, monitored, and protected by the Audubon Society as being vital to the continued existence of a large variety of bird species.

NON-PARTICIPATING PROPERTY OWNER means a property owner who has not legally agreed to the siting, development, or operation of a Utility Scale Renewable Energy System

PARTICIPATING PROPERTY OWNER means a property owner who has legally agreed to the siting, development, or operation of a Utility Scale Renewable Energy System. Such property may or may not include infrastructure or equipment related to the facility.

SHADOW FLICKER is the motion of shadows created by the movement of a rotating wind turbine blade between the sun and a receptor.

SOLAR ENERGY INSTALLATION shall mean a commercial facility that converts sunlight into electricity, whether by photovoltaics (PV), or other conversion technology, for the primary purpose of wholesale sales of generated electricity. Concentrating solar thermal devices/towers (CSV) are not permitted.

SPECIAL STATUS SPECIES shall mean federally threatened or endangered species, other federally protected species, Arizona Species of Greatest Conservation Need 1A and 1B, and US Forest Service or Bureau of Land Management sensitive species, as appropriate.

TEMPORARY METEOROLOGICAL TOWER is a temporary tower, housing, and associated wind-measuring equipment used for the purpose of establishing the viability of wind-generated energy by measuring and monitoring wind velocity, direction, shear, intensity, and regularity.

UTILITY FACILITY shall mean all above-ground Buildings, Structures and related equipment for Utility Scale Renewable Energy Systems, electric, telephone (other than wireless), and television, water distribution, reservoirs, pumping plants, wastewater treatment, propane storage facilities and natural gas providing utility services, public service sub-stations, and similar installations. Distributed Renewable Energy Systems, Public utility offices, transmission and distribution lines and supporting Structures are not included, unless associated with connecting a Utility Scale Renewable Energy System to the energy grid.

UTILITY SCALE RENEWABLE ENERGY SYSTEMS shall mean a Solar Energy, Wind Energy or Biomass Energy installation that produces electric power and transmits it through a substation to supply energy to the large-scale utility electric grid for off-site uses. Such systems may include appurtenances such as collection substations, transmission lines from the substation to the energy grid, equipment structures, meteorological towers, and energy storage equipment.

VISUAL RESOURCE is a physical feature that defines the visual and aesthetic character of an area, and can include natural features, scenic vistas and viewsheds, or human-made structures on or in a landscape. Resource designations such as a Scenic Byway, Scenic Corridor, Scenic Road, Historic Road, National All-American Road, gateway community, National Scenic, historic, or other trails, National or County parks and monuments, ridgelines, observatories and telescopes, and Roden Crater are examples of visual resources, or as identified during the application process.

WILDLIFE LINKAGE is an area of land used by wildlife to move between or within habitat blocks in order to complete activities necessary for survival and reproduction. (Arizona Game and Fish Department, 2011. The Coconino County Wildlife Connectivity Assessment: Report on Stakeholder Input.)

WIND ENERGY INSTALLATION shall mean a commercial facility that produces electricity and consists of one or more wind turbines or other such devices and their related or supporting facilities such as substations, MET towers, cables and wires, for the primary purpose of wholesale sales of generated electricity.

WIND FACILITY HOURS shall mean the hours of operation for the entire wind facility.