

LOGAN COUNTY



SOLAR ENERGY FACILITY REGULATIONS

Effective: February 17, 2026

**ARTICLE 1
SOLAR ENERGY FACILITIES**

Violation of the Logan County Regulations and/or agreements with Logan County will be cause for Logan County Board of Commissioners to revoke a Special Use Permit and any permits or agreements in conjunction with the Special Use Permit.

**Section 1-101
PURPOSE AND APPLICABILITY**

The resolution provides a comprehensive framework for the siting, construction, and operation of a Solar Energy Facility within Logan County, Colorado. Its intent is to preserve the safety and well-being of residents and property, while facilitating orderly development.

The resolution applies to all Solar Energy Facility with a Nameplate Capacity equal to or greater than 1 MW. The requirements of this Logan County Zoning Resolution shall apply to all Solar Energy Facility permitted and installed in Logan County after the effective date of this Logan County Zoning Resolution.

The resolution does not extend to the general maintenance and repair of a Solar Energy Facility permitted, installed, or modified prior to the effective date of this Logan County Zoning Resolution.

**Section 1-102
DEFINITIONS**

In addition to the definitions set forth under the Logan County Zoning Resolution, the following definitions apply to terms used in the regulatory provisions of this article.

Above Ground Footprint. The area of any project that can be seen above the ground measured in acres. If the project is required to be fenced it is the entire fenced area. If the project is unfenced, it is the above ground exterior area of any infrastructure. The area measured excludes access roads and all underground infrastructure outside of any required fencing.

CPW. Colorado Division of Parks and Wildlife.

CDPHE. Colorado Department of Public Health and Environment.

Decommissioning. The process of removing equipment and other infrastructure associated with a project and restoring the site to substantially the same condition as it was prior to the construction of the BESS Facility.

National Electric Code. (NEC) also known as NFPA 70, is a set of standards for the safe installation of electrical wiring and equipment in the United States. Its primary purpose is to ensure the safety of electrical installations by setting forth requirements to protect people and property from electrical hazards. The NEC covers the installation of electrical conductors, equipment, and raceways; signaling and communications

conductors and equipment; and fiber optics. It is updated every three years to incorporate new technologies and improve safety measures.

National Fire Protection Association. (NFPA) is a nonprofit organization dedicated to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards. Established in 1896, the NFPA develops and publishes over 300 consensus codes and standards intended to minimize the risk and effects of fire by establishing criteria for building, processing, design, service, and installation in the United States and internationally. The NFPA's mission extends beyond code development; it also focuses on research, training, education, and advocacy to promote safety and preparedness.

NFPA 22. The standard for design, construction, installation, and maintenance of water tanks for private fire protection, covering various tank types like steel, concrete, and wood, along with accessory equipment.

NFPA 70E. The Standard for Electrical Safety in the Workplace is a widely adopted American National Standard developed by NFPA and closely aligned with the Occupational Safety and Health Administration (OSHA). It establishes best practices for protecting workers from electrical hazards such as arc flash, arc blast, shock, and electrocution in industrial and commercial settings. The standard outlines requirements for safe work practices, electrical risk assessments, maintenance procedures, and the use of personal protective equipment (PPE).

NFPA 704. The standard for placarding and identification of hazardous materials for emergency response.

NFPA 855. The Standard for the Installation of Stationary Energy Storage Systems provides comprehensive guidelines for the safe installation of stationary energy storage systems (ESS), including those using lithium batteries. This standard addresses various aspects of installation to mitigate fire and explosion risks associated with energy storage technologies. It covers topics such as system design, construction, operation, and maintenance to ensure safety and reliability.

Occupied Structures: An enclosed structure where one or more human beings may be present.

Owner. The entity or entities with an equity interest in the Solar Energy Facility, including their respective successors and assignees. Owner does not refer to the property owner from whom land is leased to locate a Solar Energy Facility, unless the property owner has an equity interest in the Solar Energy Facility.

Special Use Permit for a Solar Energy Facility. A permit issued by the County required for the siting, construction, and operation of a Solar Energy Facility.

Structure. A structure refers to above ground components of the Solar Energy Facility, solar panels, and buildings accessory to the Solar Energy Facility. A structure does not include transmission line poles or substations.

Solar Energy Facility. An electricity generating facility consisting of one or more solar panels under common ownership or operating control, and includes substations, cables/wires and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customer(s) with equal to or greater than 100 kilowatts in total nameplate capacity.

USFWS. United States Fish and Wildlife Service.

**Section 1-103
SPECIAL USE PERMIT APPLICATION**

A. Application Materials. The Applicant shall submit an application for a Special Use Permit to the County that contains the minimum general information and materials required under this Section and shall pay the requisite fees as required by the Logan County Fee Schedule.

A Solar Energy Facility shall require a Special Use Permit issued, prior to construction, by the Board of County Commissioners upon the recommendations of the County Planning Commission.

The following materials shall be required in all applications for a Special Use Permit for a Solar Energy Facility:

- 1. Location Map.** A location map, to scale, that illustrates the following:
 - a. Location of the proposed Solar Energy Facility in the County, and a description of the current land use.
 - b. All property within the site and within 500 feet of the exterior boundary of the site of the proposed Solar Energy Facility.
 - c. The location and description of the current land use, including agricultural use, dwelling units, microwave communication links and airports.
 - d. The location of all military installations within a mile of proposed Solar Energy Facility.
- 2. Conceptual Site Plan.** A Conceptual Site Plan shall be prepared and submitted as part of the Special Use Permit Application. The Conceptual Site Plan, prepared at a scale acceptable to the Planning and Zoning Department, shall include the following elements:
 - a. Date of preparation, revision box, written scale, graphic scale and north arrow (designated as true north).
 - b. Clearly identified boundary lines and dimensions of the site where the proposed Solar Energy Facility will be located.
 - c. Project area boundary and approximate size of the site where the proposed Solar Energy Facility will be located, in acres or square feet.
 - d. Location of all existing structures and facilities on the site where the proposed Solar Energy Facility will be located, and on properties within 500 feet of the exterior boundary of the site.
 - e. Existing and proposed roads, railroad tracks, utility lines and facilities,

irrigation ditches and equipment within the site and within 500 feet of the exterior boundary of the site where the proposed Solar Energy Facility will be located, shown by location and dimension.

- f. A description of the ownership and a description of the easements and rights-of-way identified within 500 feet of the exterior boundary of the site.
 - g. Existing and proposed features and exclusion zones including applicable setbacks that are relevant to the review of the application, including contours, natural and artificial drainage ways, wetland areas, ditches, hydrological features (with flooding limits based on information available through the County), aquatic habitat, geologic features and hazards, and soil types, vegetative cover, dams, reservoirs, excavations, and mines.
 - h. A description of the project and each phase of development, including the approximate number of Solar Panels, and the accessory structures, power output (in MW), and infrastructure and interconnection requirements for each phase.
3. **Access.** Description of potential access route(s), including road surface material, proposed measures for dust control, and proposed road maintenance schedule or program.
 4. **Utility Interconnection or Crossing.** The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.
 5. **Land Encumbrance.** A legal description of the land that will be encumbered by the project as specified in Section 1-106 (A)(2)
 6. **Impact Analysis.** The Applicant will provide a description of the impacts that the proposed Solar Energy Facility may cause. This analysis shall include: a description of baseline conditions and the impacts that the proposed use may cause; a description of how the Applicant will mitigate impacts; and documentation that applicable standards will be satisfied. The Applicant shall also assess the potential effects of the proposed project on County services and County capital facilities. In the event impacts to County services or County capital facilities from construction and operation of a Solar Energy Facility are identified, the Applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the Applicant may be required to pay the County a mutually agreed upon impact fee to allow the County to maintain existing County Services and Capital facilities.
 7. **Decommissioning Plan.** A decommissioning plan in accordance with Section 1-107.
 8. **Wildlife Impacts.** The complete plan for the Solar Energy Facility must be submitted to the USFWS and the CPW for its review and consideration of the

potential impact of the Facility on any wildlife resources and its recommendations for mitigation of any impacts. Its written recommendations must be submitted to the Logan County Planning and Zoning Department at least 14 days prior to the public hearing of the Board of County Commissioners on the permit application; however, the absence of such recommendations shall not preclude the Board from holding the public hearing or taking action on the application.

a. Construction will not be allowed within an area designated by Colorado Division of Parks and Wildlife as critical habitat, unless adverse impacts are sufficiently mitigated as determined by the Board of County Commissioners in its sole discretion.

9. **Military Impacts.** The complete plan for the Solar Energy Facility must be submitted to the United States Department of War for its review and consideration of the potential impact of the Facility on any military installations and its recommendations for mitigation of any impacts. Its written recommendations must be submitted to the Logan County Planning and Zoning Department at least 14 days prior to the public hearing of the Board of County Commissioners on the permit application; however, the absence of such recommendations shall not preclude the Board from holding the public hearing or taking action on the application.

10. **Notice to Landowners/Mineral Estate Owners.** The Applicant shall provide notice of the proposed project, including notice of the time and place for Planning Commission hearings on the application, to the individual mineral estate owners within the project site as specified in C.R.S. section 24-65.5-103, and to individual property owners within 500 feet of the exterior project boundary as specified in Section 5 of the Logan County Zoning Resolution.

11. **Additional Information and Waivers.** Logan County may request additional information that may be required to evaluate the proposed Solar Energy Facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfies applicable standards.

B. Pre-Construction Materials. The Applicant will be required to submit the following materials prior to commencement of construction and prior to the issuance of a Special Use Permit:

1. **Detailed Site Plan.** A Detailed Site Plan, prepared at a scale acceptable to the Planning and Zoning Department and certified by a professional surveyor, shall be submitted for review and approval by the Planning & Zoning Coordinator, and shall include the following elements:

a. Date of preparation, revision box, written scale, graphic scale, and north arrow (designated as true north).

b. Location of all proposed structures and facilities, including the location and

to commencement of construction.

- 7. Geotechnical Report.** The Applicant shall provide written certification that, prior to construction, a professional engineer licensed in the State of Colorado will complete a Geotechnical Study that includes the following if applicable:

 - a.** Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
 - b.** Foundation systems design criteria for all proposed structures.
 - c.** Slope stability analysis.
 - d.** Grading criteria for ground preparation, cuts and fills, and soil compaction.
- 8. Baseline Soil Report.** The Applicant shall provide written certification that a qualified independent soil testing laboratory will perform pre-construction soil testing to determine baseline soil conditions, with identification of any pre-existing industrial contamination. Soils must be tested on a minimum of two sites for any project area, and a minimum of two sites per 160 acres of project area. Soils must be tested every five years during operation of the facility and again upon decommissioning. Test site locations shall be recorded and identified with GPS coordinates, and upon decommissioning, soil conditions shall be re-examined by the laboratory to determine that soil conditions have not been adversely impacted by the project. The Applicant shall obtain and promptly provide to the Planning & Zoning Department all soil test results as soon as they become available.
- 9. Road Use Agreement.** Agreements for use of county roads during construction will be negotiated with Logan County Road and Bridge Department and the County Attorney and formally approved by the Board of County Commissioners.
- 10. Liability Insurance.** The Applicant shall provide evidence of liability insurance to cover loss or damage to persons and structures during construction and operation of the Solar Energy Facility.
- 11. Maintenance of Solar Panels.** The Applicant shall provide a statement certifying that the Solar Panels will be maintained and operated in accordance with prudent utility practices, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.
- 12. Additional Information and Waivers.** The County may request additional information that may be required to evaluate the proposed Solar Energy Facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfies applicable standards.

Section 1-104
SUBMITTAL REQUIREMENTS

- A.** In addition to any submittal documents required by the general Zoning Resolution for the applicable use permit, except as modified by these Solar Energy Facility Regulations, an application for a Solar Energy Facility shall contain the following items:
- 1. Change Conditions Narrative.** Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
 - 2. Site Plan.** A detailed site plan as defined in Section 1-103(B)(1).
 - 3. Narrative.** A narrative providing an explanation of the project, the above grade and below grade infrastructure, the type of equipment and any identified environmental or wildlife impacts and mitigation.
 - 4. Maintenance Plan.** A system and property maintenance plan describing continuing Solar Energy Facility maintenance and property upkeep during the operation of the facility. The maintenance plan shall conform to the manufacturer's recommendation and shall be documented and available to the Planning Coordinator at any time.
 - 5. Emergency Operation Plan.** The applicant will work with local fire departments and Logan County Emergency Management to establish an emergency operation plan including the following:
 - a.** Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.
 - b.** Procedures for inspection and testing of associated alarms, interlocks, and controls.
 - c.** Procedures to be followed in response to notifications from the Solar Energy Facility management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.
 - 6. Drainage/Storm-Water Run-Off.** Run-off shall be managed in accordance with applicable County, State and Federal regulations.
 - a.** If applicable, the Applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and Environment, Water Quality Control Division.

- 7. Revegetation Plan.** A revegetation plan in accordance with Section 1-106 (A)(14)(g).
- 8. Decommissioning Plan.** A decommissioning plan in accordance with Section 1-107.

Section 1-105
SPECIAL USE PERMIT REVIEW AND APPROVAL
PROCESSES FOR A SOLAR ENERGY FACILITY.

- A. Pre-Application Meeting.** Applicant shall schedule a pre-application meeting with Planning and Zoning to discuss the proposed Solar Energy Facility.
1. The pre-application meeting is intended to provide information pertinent to the site and the proposal, provide an understanding of the applicable review procedures and the standards to be met for approval of the Special Use Permit application, and to explain the application materials required for submittal.
- B. Completeness Determination and Review of Special Use Permit Application Materials.** Within thirty (30) business days following receipt of the Special Use Permit application, the Planning and Zoning Department shall determine whether the application is complete. An application shall be deemed complete if it includes all information identified as being required in the pre-application meeting and in Section 1-105(A) of these regulations.
1. **Application is Not Complete.** If the application is not complete, the Planning and Zoning Department shall notify the Applicant in writing of any materials that must be submitted for the application to be deemed complete. The time to review the application shall not begin to run until the application has been determined to be complete.
 2. **Completeness Date.** Once the application has been determined to be complete, Planning and Zoning shall stamp the application with the date that it was determined to be complete, and all time frames pertaining to review of the application shall be based on the completeness date.
- C. Review of Special Use Permit Application Materials by Planning and Zoning Department.** Within thirty (30) calendar days from the date of the completeness determination, the Planning and Zoning Department shall review the Special Use Permit application to determine its conformance with the requirements of the Logan County Zoning Resolution. The Planning and Zoning Department may request additional professional analysis by an independent review agency.
1. The period for comment by any applicable review agency shall be thirty (30) calendar days from the date the application is deemed complete by the Planning and Zoning, unless an extension has been requested by the review agency. The Planning and Zoning Department may grant an extension if it is determined that good cause for the delay has been shown. An extension shall not exceed fifteen (15) days. The failure of any agency to respond within the 30-day review period or within the period of extension shall be deemed an approval of such plan by the review agency.
 2. The funds deposited at time of application shall be used for direct payment of review fees charged by a review agency including engineers, technical consultants or any other review agencies. At the completion of the project, any remaining

funds held by Logan County for review and inspections will be returned to the applicant.

3. The Applicant shall have the right to review the comments and recommendations received from the review agencies. The Applicant may submit additional information and make changes in the application to respond to the comments of the review agencies, under the following conditions:
 - a. If the changes are substantial or significantly alter the nature, character or extent of the application, the Planning and Zoning Department may refer the information and revised application back to some or all review agencies for further comment.
 - b. The Planning and Zoning Department may extend the period for comment as appropriate for agencies to review any additional information or revised application materials. Agencies will be allowed an additional thirty (30) days to comment on any new information or revised application materials. The County may grant an extension if it is determined that good cause for delay has been shown. An extension shall not exceed fifteen (15) days. The failure of any agency to respond within the 30-day review period or within the period of extension shall be deemed an approval of such plan by the review agency.
 - c. The period of time for review and final action on an application by the Board is typically between sixty (60) to ninety (90) days following receipt of a complete application. In the event that an extension is required by the Planning and Zoning Department, the period of time for review shall not exceed four (4) months from the date the application was determined to be complete.

D. Evaluation of Application by Planning Coordinator. The Planning Coordinator shall review the Application for compliance with the relevant approval standards in Section 1-106. The Planning Coordinator will notify the applicant of any deficiency.

E. Public Hearing and Recommendation by Planning Commission. The public hearing process, including public notice, hearing procedure, action by the Planning Commission, final decision, and Board of County Commissioner review and approval shall be governed by the requirements of the Logan County Zoning Resolution.

F. Life of Permits. The Special Use Permit for a Solar Energy Facility shall be valid for the life of the Solar Energy Facility, provided there are no amendments or additions to the Solar Energy Facility, and provided that the construction is commenced, and is progressing with diligence, within three (3) years of the issuance of a Special Use Permit. Upon written request, filed by the Owner/Applicant, prior to the expiration of the three year construction commencement period, the Planning Coordinator may approve one (1) extension of time for twelve (12) months. Any request for an extension of time beyond the initial twelve (12) month extension shall require approval by the Board of County Commissioners. The Board may approve one or more additional extensions upon making findings that the project continues to comply with applicable plans, policies, and regulations, and that no substantial

changes in circumstances have occurred that would warrant modification or revocation of the permit. If new additions are installed that increase the acreage from the original Detailed Site Plan, a new Special Use Permit will be required prior to installation, and the fees stated in Section 1-103(A) will be required for such increases. Any other amendments will be charged a fee in accordance with the Logan County Fee Schedule.

G. Construction Inspection. Logan County may hire, at the Applicants expense, a third party to inspect the construction activities associated with the Solar Energy Facility. The funds deposited at the time of application for review and inspections will be used for this purpose.

H. Monitoring. Upon reasonable notice, the Board or its official representative may coordinate with the Owner to enter the property on which a Solar Energy Facility has been permitted to confirm compliance with the terms of the permit approval and applicable County regulations.

Section 1-106
STANDARDS APPLICABLE TO SOLAR ENERGY FACILITY.

A. General Standards. A Solar Energy Facility may be permitted by Special Use Permit if the following criteria are met:

- 1. Accessory Uses and Structure Requirements.** A Solar Energy Facility shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in the Logan County Zoning Resolution.
- 2. Size Limitation.** Except for developments that do not exceed 2 megawatts (and will not exceed 2 megawatts by phase development), all land proposed for a Solar Energy Facility, including any existing Solar Energy Facility infrastructure, shall have an above ground footprint in the ratio of 1 acre of project to 8 acres of total land encumbered. For example, a project with a 10-acre above ground footprint would require a total of 80 acres of land to be encumbered by the project. The encumbered land shall be contiguous to the land on which the project is to be constructed, and, prior to construction, the Applicant shall obtain an easement on the encumbered land as specified in (a.) below. The maximum allowable above ground footprint for any section of ground (640 acres) shall be 80-acres unless developed in a cluster as described in (b.) below.
 - a.** The easement shall preclude the encumbered land from future development for a Solar Energy Facility project for the lifetime the proposed project and until it is decommissioned in accordance with Section 1-107. The easement shall be recorded with the Logan County Clerk and Recorder.
 - b.** To facilitate the efficient development of a Solar Energy Facility and associated infrastructure, if the applicant owns or can acquire an easement on additional land lying contiguous to the land proposed for the project, the above ground footprint may be enlarged. The ratio of land affected by the project to the land encumbered by the easement shall not exceed the ratio of 1 to 8.
 - c.** The size limitation may be waived by the Logan County Board of Commissioners, in its sole discretion, if the project is in or contiguous to land that is currently zoned Industrial.
 - d.** The solar project shall be on contiguous land.
- 3. Buildings, Containers, and Equipment.** All Solar Energy Facility containers, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado. All containers and/or associated buildings, and enclosures will be placarded as deemed necessary per NFPA 704.
- 4. Public Health, Safety, and Welfare.** The proposed Solar Energy Facility shall not be detrimental to the health, safety or general welfare of the

community. The Solar Energy Facility, including all Solar Panels, shall be maintained and operated in accordance with prudent utility practices, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

- 5. Compliance with Comprehensive Plan and Intergovernmental Agreements.** The proposed Solar Energy facility must be consistent with relevant provisions of the Logan County Comprehensive Plan and any intergovernmental agreement between the County and a municipality that applies to the area where the use will occur.
- 6. Compliance with Other Regulations.** The Solar Energy Facility shall comply with all applicable rules and regulatory requirements of the State and Federal agencies, and of Logan County.
- 7. Fencing.** All Solar Facilities, including all mechanical equipment, shall be enclosed by a minimum of a seven (7) foot tall fence, unless otherwise determined by the Logan County Board of Commissioners, with a gate to prevent unauthorized access, unless housed in a building dedicated to the Solar Facility. No fencing may interfere with any ventilation or exhaust ports, or impede any act of maintenance, repair or responses to any damage, malfunction or responses of fire or EMS personnel.
- 8. Placement.** The Solar Energy Facility, its components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado, and shall be located a minimum of five hundred feet (500') from any occupied structure or water well.
- 9. Water and Waste Water Service.**
 - a. The water and septic system shall be adequate to serve the Solar Energy Facility.
 - b. The water and septic system shall comply with County, State, and Federal standards.
- 10. Roadways and Access.**
 - a. Legal access to a public right-of-way to and from the Solar Energy Facility shall be safe and in conformance with access standards required by Logan County or the State of Colorado.
 - b. The Solar Energy Facility shall make reasonable efforts to prevent traffic congestion during operations and unsafe traffic conditions during the construction phase or operations.

- c. Adequate turning radii shall be installed at all entrances to accommodate large truck movement.
 - d. Off-street parking and loading zones shall be surfaced with gravel or the equivalent and shall be graded to prevent drainage problems.
 - e. Staging activities and parking of equipment and vehicles shall occur on-site and on private rights-of-way and shall be prohibited on maintained County Roads.
- 11. County Road Use.** The use of any County Roads during construction shall be in compliance with Federal, State, County and local regulations governing such activities. The Applicant will prepare a Road Use Agreement that includes a mitigation plan to address potential impacts to County Roads to be used during construction. As part of the Road Use Agreement, the Applicant, at its expense, will be required to return any County Roads that are impacted by construction to their pre-construction baseline condition or better.
- 12. Service Delivery System Capacity.** The Solar Energy Facility shall not have significant adverse effect on the capability of local government to provide services or exceed the capacity of service delivery systems.
- 13. Impact Fees.** The Owner/Applicant shall complete a study to assess the potential impacts of the proposed project on County services and Capital facilities. In the event that impacts to County services or County capital facilities from construction and operation of the Solar Energy Facility are identified, the Applicant shall develop a plan to maintain County services and County capital facilities. If impacts cannot be fully mitigated, the Applicant may be required to pay Logan County a mutually agreed upon impact fee to allow the County to maintain existing County Services and Capital facilities. The Owner shall provide all necessary training to allow the County to adequately handle the increased services provided by local fire departments and ambulance departments caused by the construction and operation of the Solar Energy Facility.
- 14. Resource and Environmental Protection Standards.**
- a. **Water Quality Standards.** The Solar Energy Facility shall not cause significant degradation of the quality of surface or ground water resources and shall comply with applicable County, State, and Federal water protection laws.
 - b. **Air Quality.** The proposed Solar Energy Facility shall comply with applicable County, State and Federal air quality laws.
 - c. **Glare, Dust or Noise.** Construction and operation of the Solar Energy Facility shall not significantly increase existing glare, dust or noise at surrounding properties.

- i. The proposed Solar Energy Facility shall comply with the statutory provisions for maximum permissible noise levels in Section 25-12-103 C.R.S., with the applicable standard determined by the zoning of the property receiving the noise, except that, noise levels emitted by the Solar Energy Facility shall in no event exceed the maximum permissible decibels for light industrial zones. Noise levels may be tested, by a third party tester chosen by Logan County, prior to operation and quarterly and unannounced after operation begins.
 - ii. Fugitive dust and particulate emissions shall be controlled on the site.
 - iii. Waste materials shall be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris and other potential nuisance conditions.
- d. **Soil Quality Protection.** If at any time during construction, operation, or during the five (5) year periodic testing, soil contamination is found, the contaminated soil must be mitigated or removed and disposed of according with any applicable laws.
- e. **Erosion and Sedimentation Control.** Erosion and sedimentation control measures that ensure disturbed areas and soil stockpiles are stabilized during construction shall be implemented. Prior to construction, revegetation will be established according to a plan following NRCS guidelines.
- f. **Drainage/Storm-Water Run-Off.** Run-off shall be managed in accordance with applicable County, State and Federal regulations.
 - i. If applicable, the Applicant shall obtain a Construction Stormwater Discharge Permit from the Colorado Department of Public Health and Environment, Water Quality Control Division.
- g. **Protection of Agricultural Lands.** The Solar Energy Facility shall not have a significant adverse impact on agricultural lands and agricultural operations above what is allowed by the landowner and shall not have a significant impact on surrounding landowners.
- h. **Revegetation Plan.** Prior to construction, a site-specific plan of revegetation for the project area must be approved and implemented for any land that is in, or has been under cultivation, or is otherwise unvegetated. In addition, the vegetative cover outlined in the revegetation plan must be established to ensure the soil is stable prior to construction. The revegetation plan shall be recommended by the Natural Resource Conservation Service (NRCS) and shall be approved by the Board of County Commissioners. The declaration that the vegetation has been established and the land is stable shall be made by the NRCS as well. An independent third-party contractor, approved by the Board of County Commissioners, may be used in lieu of the NRCS, using NRCS guidelines for the project area.

- i. **Weed Control.** All areas of the Solar Facility including perimeter fencing shall remain weed free. This includes weeds that have blown into the facility.
- j. **Wildlife Impacts.** If significant project impacts on wildlife resources are identified by the USFWS or CPW, the Applicant may be required to modify its site plan or operations plan to mitigate the wildlife impacts in accordance with USFWS or CPW recommendations, as determined by the Board of County Commissioners.
- k. **Military Impacts.** If significant project impacts on military installations are identified by the United States Department of War, the Applicant may be required to modify its site plan or operations plan to mitigate the military installation impacts in accordance with United States Department of War recommendations, as determined by the Board of County Commissioners.

B. Site and Facility Development Standards.

1. General Site Plan Standards.

- a. The site is adequate in size and shape to accommodate the Solar Energy Facility and all appurtenant facilities.
- b. To the extent practicable, the site shall be developed in a manner that preserves the natural features of the site, avoids areas of environmental sensitivity, and minimizes adverse visual impacts.

2. Setbacks. Unless otherwise required by federal or state regulations applicable to the Solar Energy Facility, the following minimum setbacks shall apply.

- a. **External Setbacks.** Front, rear and side setbacks shall be measured as the distance between the nearest property line and the outermost edge of a structure, along a line at right angles to the property line.
- b. **Internal Setbacks** – Spacing between and around a Solar Energy Facility shall comply with NFPA 855 requirements related to setbacks and buffers.

Safety Setbacks.

	Solar Minimum
Setback from above-ground public electric power lines or communication lines.	70 feet ¹
Setback from existing public road or highway or railroad.	70 feet ²

Setback from occupied structures including: residence, school, hospital, church or public library, unless appropriate easements are secured.	500 feet
Setback from all other property lines.	70 feet
¹ Measured from the outer boundary of the public utility right-of- way or easement [or from existing power line or telephone line].	
² Measured from the outer boundary of the public road/highway right-of-way or railroad right-of-way.	

- c. Setback from the Section Lines on a Case-by-Case basis. Logan County has established right-of-way's (ROWS) that are located 30 feet on each side of section lines. The purpose of this ROW is to allow for maintenance of existing county roads and construction of new county roads. Placement of Solar Energy Facilities and their foundations within this ROW will be reviewed by Logan County on a case-by-case basis to confirm that they will not conflict with Logan County's existing road plans and future road plans. In the event of a potential conflict, Solar Energy Facilities may need to be relocated outside of this established ROW to allow for future construction of County Roads. In the event that there is no conflict, Logan County may issue a variance that will allow for placement of the Solar Energy Facilities within the existing County ROW.
 - d. It is the responsibility of the Applicant to apply for a variance in these situations, and to provide exact location of proposed placement of Solar Energy Facilities, and the distance from section lines. In the event a survey is required, the Applicant will be responsible for paying the costs of survey.
 - e. All setbacks may be waived or made more restrictive by the Board of County Commissioners on a case-by-case basis.
- 3. Scenic Resources Setback.** A Solar Energy Facility shall be setback a minimum 1/4 mile (1,320 feet) from any highway, designated to be a scenic highway or roadway by the Logan County Comprehensive Plan or by the state of Colorado.
- a. A scenic resource protection setback requirement may be waived if the Board determines that the characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value.
- 4. Notice and Record of Waiver or Reduction of Setback.**
- a. Any proposed setback waiver or reduction shall be included in all public notices regarding the Special Use Permit application review.

- b. If the application is approved with a setback waiver or reduction, the approved setbacks shall be specified in the approval.

5. Safety and Security.

- a. Fencing, or other barriers acceptable to the County, shall be installed to prevent unauthorized access to the Solar Energy Facility and all associated equipment.
 - i. A Solar Energy Facility and its associated systems shall have a perimeter fence height of at least seven (7) feet, consistent with requirements established in NFPA 704. A Solar Energy Facility shall also comply with specifications established in NFPA 855 relating to barriers and buffering.
- b. Every attempt will be made to adhere to the current National Electrical Code.
- c. Guy wires shall be distinctly marked.
- d. Signs warning of the electrical hazard and other hazards associated with the Solar Energy Facility shall be posted at the entrance of the facility.

6. Lighting Requirements. A Solar Energy Facility shall comply with jurisdictional requirements related to lighting. The Facility shall comply with lighting requirements within Logan County Zoning Resolution (as determined by land use type, if applicable), or requirements specified in state statute or code for electrical infrastructure as applicable to Solar Energy Facility, so long as such requirements do not conflict with NFPA 855 and NFPA 70. Lighting shall be downward facing as to minimize the glare to surrounding landowners.

7. Fire Protection. The Solar Energy Facility shall have adequate fire control and prevention measures approved by the local fire district. In addition, the following requirements shall be met:

- a. **Fire break.** There shall be a twenty (20) foot fire break every one-half mile. This fire break shall be fenced on either side to also serve as a wildlife corridor.
- b. **Vegetation.** Vegetation shall be maintained at a maximum height of six (6) inches, except as otherwise recommended by a local fire district or authority approved by the Logan County Board of Commissioners.
- c. **Water Supply.** A water tank having a minimum capacity of a 10,000 gallon tank with a 4" NSM (National Standard Male) connection will be provided for fire department use. A level indicator shall be attached to the water tank and the tank shall be maintained at full capacity. Tank and outlet location shall be accessible to emergency vehicles, near the entrance, and approved by the local fire department. Water tank design, material, fabrication, and installation shall be in accordance with NFPA 22. When an adequate water source, as

determined by the local fire department, is available within two (2) miles, the fire water tank requirement may be waived.

- 8. Underground Location of Electrical Collection System Wiring.** Unless geologic conditions or other technical engineering considerations prevent underground installation, electrical collection system wiring and powerlines for the Solar Energy Facility shall be installed underground except where the Solar Energy Facility collector system wiring is brought together from the project substation to the point of electrical interconnection. Overhead transmission lines are permissible from the project substation to the point of electrical interconnection. All underground installations located within the public road easement or right-of-way shall comply with the applicable permit and design requirements of Logan County Road and Bridge Department and/or Planning and Zoning Department, and should include the following elements:
 - a. Restoration.** Any disturbed portion of the right of way shall be restored as nearly as possible to the condition as existing immediately prior to installation.
 - b. Safety.** Safety measures shall be implemented in accordance with County, State and Federal requirements to protect the public.
 - c. Roadway Crossing.** If the installation crosses a roadway, it shall be located as perpendicular to the roadway as physically possible and installed in compliance with the requirements of Logan County Road and Bridge Department and/or Planning and Zoning Department.
 - d. As-Built Drawings.** As-built drawings shall be provided to Logan County no later than 12 months after the installation has been completed, no later than 12 months.
 - e. Permit and Notice to Proceed.** Work shall not commence until the required permit(s) and notice to proceed with the installation(s) have been issued by Logan County Road and Bridge Department.
- 9. Interconnection and Electrical Distribution Facilities.**
 - a.** Transmission from the project substation to the point of electrical interconnection shall comply with the National Electrical Code.
 - b.** Interconnection shall conform to the requirements of the electric utility company, and applicable state and federal regulatory codes.
- 10. Electronic Interference.** The applicant shall minimize or mitigate any interference with electromagnetic communications caused by the Solar Energy Facility, including radio, telephone or television signals.

11. Certification of Equipment and Appurtenant Facilities.

- a.** All foundations systems, and solar facilities (i.e. structural systems) shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices.
- b.** The electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to be compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

12. Signs. A Solar Energy Facility shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the Solar Energy Facility.

**Section 1-107
DECOMMISSIONING**

As indicated in Sections 1-103 and 1-104, the Applicant must prepare and submit a decommissioning and reclamation plan which details the termination of the project at the end of its useful life, the removal of the equipment and infrastructure, and the reclamation of the site. The plan must address how soil contamination will be minimized and controlled during project operations, and how any contamination will be remediated upon decommissioning so that the land will be fully restored to its original or better condition and meet all environmental standards of any state or federal agency having jurisdiction. At a minimum, the plan must include and demonstrate how it will comply with the following:

- a.** The anticipated life of the project.
- b.** The estimated decommissioning and reclamation cost in current dollars. The cost estimate shall be prepared by an experienced professional engineer.
- c.** The method for estimating the cost, which must explicitly detail the cost without any reduction for salvage value. The estimate will be reviewed by a third-party approved by the County.
- d.** The proposed method of ensuring that funds will be available for decommissioning and removal. The amount of funds required shall be the full amount of the estimated decommissioning cost and shall be provided in the form of cash escrow, surety or performance bond, or other security as approved by the County. The surety must be updated when the decommissioning cost estimate is periodically updated.
 - i.** The Applicant shall post the financial security before any building permit is issued to allow construction of the facility.
 - ii.** An escrow account agreement shall prohibit the release of the escrow funds without the written consent of the County. The County shall consent to the release of the escrow funds upon the owner's or occupant's compliance with the approved decommissioning plan. The County may approve the partial release of escrow funds as portions of the approved decommissioning plan are performed.
- e.** The method that the estimated decommissioning cost will be kept current. The facility owner or operator must engage a qualified individual to re-calculate the estimated cost of decommissioning at an interval of every five years, and the estimate shall take into account any adverse soil impacts that are identified in the results of the periodic soil testing that is undertaken pursuant to Section 1-103(B)(8). If the recalculated estimated cost of decommissioning exceeds the original estimated cost of decommissioning by ten percent (10%) or more, then the owner or operator must adjust the financial security to meet the new cost estimate. If the recalculated estimated cost of decommissioning is less than ninety percent (90%) of the original estimated cost of decommissioning, then the

County may approve a reduced amount of security to the recalculated estimate for decommissioning.

- f.** The method for decommissioning the facility and restoring the site.
 - i.** Facilities that have reached the end of their useful life or have not been in active and continuous service for a period of six (6) months (the “decommissioning triggers”) shall be decommissioned at the Facility owner’s or operator’s expense, except if the facility is being repowered or a force majeure event has or is occurring which requires a longer period of time for repairs; however, the County may require evidentiary support that a longer repair period is necessary. Decommissioning must be completed within two (2) years of the occurrence of the decommissioning trigger. If the owner or operator of the facility fails to complete decommissioning within two (2) years of the occurrence of a decommissioning trigger, the County may collect the financial security and hire a third-party contractor to enter the property and physically remove and dispose of the installation.
 - ii.** The Facility owner or operator must notify the Planning & Zoning Coordinator in writing of the proposed date of discontinued operations and plans for removal.
 - iii.** Decommissioning shall include removal of anything above-ground and below-ground (to a depth of 48 inches) that was constructed or erected as part of the Facility, to include structures, buildings, equipment, cabling and wiring, electric systems, electrical components, security barriers, driveways, entrances, foundations, pilings, and any other associated facilities.
 - iv.** Once removal is completed, soil restoration must occur if soil conditions have been adversely impacted, as indicated by the baseline soil testing and report required by Section 1-103(B)(8).
 - v.** Decommissioning must also include restoration of the Project Area in accordance with the Revegetation Plan required by Section 1-106(A)(14)(g).
 - vi.** Any exception to site restoration, such as leaving driveways, entrances, or landscaping in place, or substituting plantings, shall be requested by the landowner in writing, and must be approved by the board of county commissioners.
 - vii.** Hazardous materials must be disposed of in accordance with the requirements of federal and state law.
 - viii.** At no time will the Logan County Landfill be available for disposal of wind tower components, BESS components, solar energy panels, or DCF electronic waste.

**Section 1-108
OWNERSHIP CHANGES**

If the ownership of a Solar Energy Facility changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit and decommissioning plan. A new owner or operator of the Solar Energy Facility shall notify the Planning and Zoning Department, Board of County Commissioners, and any landowners including neighboring landowners, in writing, of such change in ownership or operator within sixty (60) days of the ownership change. Notifications must include name of Chief Executive Officer, company phone number, and company address of both the subsidiary and parent company. The special use permit and all other local approvals for the Solar Energy Facility will be voided if a new owner or operator fails to provide written notification as provided herein in the required timeframe. Reinstatement of a voided special use permit will be subject to the same review and approval processes for new applications, along with any required fees. The new owner shall be responsible to apply for and obtain any necessary extensions for any building permit issued for the Solar Energy Facility.