

Planning Board Regulation No. PBR-2025-2

BE IT ENACTED BY THE QUORUM COURT OF THE COUNTY OF MADISON,
STATE OF ARKANSAS; A RULE TO BE ENTITLED:

A RULE ENACTING REGULATIONS FOR SOLAR ENERGY SYSTEMS IN THE
COUNTY OF MADISON, STATE OF ARKANSAS

WHEREAS, Ordinance No. 2025-7 authorizes the Planning Board, with the advice and consent of the Quorum Court, to promulgate plans, rules, and regulations in the areas of planning and zoning within the County of Madison, State of Arkansas, and,

WHEREAS, the Planning Board has drafted, reviewed, and held public hearings on this rule in accordance with the law.

NOW, THEREFORE, IN ACCORDANCE WITH ORDINANCE NO. 2025-7, BE IT
PROMULGATED BY THE QUORUM COURT OF MADISON COUNTY, ARKANSAS:

Section 1. Purpose and Intent

This regulation is adopted to promote the safe, effective, and efficient use of solar energy systems within Madison County, while minimizing visual, environmental, and neighborhood impacts, protecting natural resources, and ensuring compatibility with surrounding land uses.

Section 2. Definitions

- Solar Energy System (SES) – A device or structural feature used to harness solar energy for electricity generation.
- Ground-Mounted System – A solar energy system mounted directly to the ground and not attached to a structure.
- Roof-Mounted System – A solar energy system affixed to the roof of a legally permitted structure.
- Decommissioning Plan – A detailed plan outlining removal and site restoration after the end of project life or abandonment.
- Environmental Study – An assessment of potential impacts to wildlife, water, habitat, and soils, prepared by qualified professionals.
- Dark-Sky Lighting – Outdoor lighting that is shielded and downward-facing to limit glare and light pollution.

Section 3. Classification of Solar Energy Systems

Class	Name	Size Threshold	Typical Use
1	Residential Solar System	4 kW – 15 kW	Individual residential or accessory use
2	Business/Agricultural Solar System	>15 kW – <100 kW	Farm, business, or larger residential use
3	Commercial Solar System	100 kW – <1 MW	Commercial or institutional property
4	Commercial Utility-Scale Solar System	1 MW and Over	Grid-scale utility generation

Section 4. Permitting Requirements

Class	Permit Fee
1	\$100
2	\$300
3	\$1,000
4	\$2,000 plus \$1,000 per MW over 1 MW

- All permit applications shall include a site plan, interconnection approval, electrical and structural designs, liability insurance, and description of construction methods.
- All permit applications shall be reviewed by the Madison County Planning Board for determination on approval.

Section 5. Roof-Mounted Solar Systems (Classes 2–4)

This section shall apply to all Class 2, 3, and 4 roof-mounted solar energy systems.

1. Structural Safety

- A licensed professional knowledgeable on structural safety must verify that roof-mounted systems do not exceed allowable roof loads.

2. Height Limits

- No component shall extend more than 4 feet above the peak of the roof.

3. Overhang Restriction

- Solar panels must not extend more than 1 foot beyond the roof edge, eave, or gutter line.

4. Visual Impact Mitigation

- Panels visible from public roads or neighboring residential structures must use low-glare materials and, where feasible, align flush with the roof pitch.
- Associated equipment (e.g., inverters, batteries) shall be screened from public view using vegetation, fencing, or architectural elements.

Section 6. Ground-Mounted Setbacks and Visual Buffers (Classes 2–4)

This section shall apply to all Class 2, 3, and 4 ground-mounted systems.

1. Minimum Setbacks

- Public Roads: 200 feet
- Property Lines (non-participating): 200 feet
- Residences or Driveways (non-participating): 400 feet

2. Visual Screening

- If any part of the SES is within 400 feet of a non-participating residence or driveway:
 - Install a vegetative screen of native trees/shrubs or
 - A sight-obscuring fence at least 6 feet tall.
- Vegetation must reach 75% opacity within 3 years of planting.
- A plan must be submitted detailing responsible parties and a reasonable means of funding continued maintenance.

Section 7. Wildlife-Friendly Fencing (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- Fencing shall:
 - Be a minimum of 6 feet in height.
 - Include a 6–8 inch gap at the base to allow small animal passage.
 - Avoid barbed wire or electric fencing unless explicitly permitted.
 - Use non-reflective, neutral-colored materials whenever possible.

Section 8. Lighting Standards (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- All lighting shall:
 - Be fully shielded, downward-facing, and motion-activated or timer-controlled.
 - Emit no more than 3000 Kelvin color temperature.
 - Conform to Dark-Sky Lighting standards as approved by the Planning Board to prevent light pollution and neighborhood disturbance.
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Section 9. Noise Limits (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- Inverters, transformers, and other mechanical components must not exceed:
 - 55 dBA at the property line during daytime (7:00 AM – 10:00 PM).
 - 45 dBA at the property line during nighttime (10:00 PM – 7:00 AM).
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Section 10. Ground Disturbance and Vegetation (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

1. Minimized Disturbance
 - Site design shall minimize grading, compaction, and erosion.
 - Stockpiled topsoil must be reapplied during site restoration.
 2. Establish Native Vegetation
 - Seed mixtures shall consist of Arkansas-appropriate native vegetation, approved by the Planning Board.
 3. Maintenance Standard
 - Vegetative cover must be established within 2 growing seasons.
 - Minimum 90% coverage must be maintained.
 - Vegetation must be managed through mowing, grazing, or selective herbicide to prevent:
 - Weed overgrowth
 - Bare patches exceeding 200 square feet
 - Vegetation taller than 36 inches
 4. Operations & Maintenance Plan
 - A plan must be submitted detailing vegetation care practices, schedules, responsible parties, and a reasonable means of funding continued maintenance.
 5. Planning Board Review
 - The Madison County Planning Board may inspect at their discretion; if deficiencies are found, the owner shall have 60 days to correct them.
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Section 11. Environmental Study (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- Applicants must submit a qualified environmental impact study addressing:
 - Wildlife and critical habitat (Arkansas Game & Fish consultation recommended).
 - Wetlands and floodplains using FEMA and NWI data.
 - Soil erosion/stormwater mitigation consistent with ADEQ regulations.
 - Historic/cultural resource review in coordination with Arkansas SHPO, if appropriate to site location.
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Section 12. Decommissioning (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- A Decommissioning Plan must include:
 - Removal of all panels, racking, cabling, fencing, foundations (to 3 feet below grade), inverters, and all other equipment and paraphernalia related to the SES.
 - Site restoration to original grade and reseeded with native vegetation.

- A certified cost estimate, updated every 5 years.
- A financial assurance instrument (bond, escrow, or letter of credit) equal to 125% of estimated costs.

Section 13. Abandonment (Classes 3–4)

This section shall apply only to Class 3 and Class 4 solar energy systems.

- A SES shall be considered abandoned if inactive for 12 consecutive months without written notice and plan to recommission.
- The County may enforce the decommissioning plan and draw upon financial assurance to complete removal.

Section 14. Enforcement

- A first violation may result in fines up to \$1,000.
 - Repeat violations may result in fines up to \$2,000 per offense.
 - A continuing violation may incur up to \$500 per day for each day the violation persists.
 - Remedies may also include permit suspension or revocation, and legal injunction or enforcement orders.
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Section 15. Severability

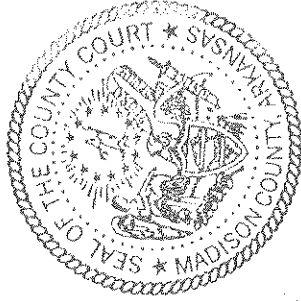
If any provision of these regulations is found to be invalid, the remainder shall remain in full force and effect.

Rule Effective: 01-01-2026

Dated: 10-20-2025

Approved: 
Larry Garrett, Madison County Judge

Attest: 
Austin Boatright, Madison County Clerk



FILED

OCT 21 2025

AUSTIN BOATRIGHT
COUNTY AND PROBATE CLERK
MADISON COUNTY, ARKANSAS
BY 