

RESOLUTION NO. ¹⁹⁻¹⁰¹⁻²⁵~~12-25-01~~ _____

A RESOLUTION AMENDING THE ZONING REGULATIONS OF PRATT COUNTY, KANSAS, TO ESTABLISH REGULATIONS CONCERNING BATTERY ENERGY STORAGE SYSTEMS (BESS)

Preamble

WHEREAS, pursuant to K.S.A. 12-757(b), following published notice and a public hearing, the Pratt County Zoning Board has recommended amendments to the Zoning Regulations of Pratt County to establish regulations concerning Battery Energy Storage Systems; and

WHEREAS, the County is authorized pursuant to K.S.A. 12-757(a) to act on such recommendations; and

WHEREAS, the Board of County Commissioners approves and adopts the recommendations of the planning board;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PRATT COUNTY, KANSAS, THAT THE ZONING REGULATIONS ARE AMENDED AS FOLLOWS:

I. Amendment to Zoning Districts

A-1 Agricultural District (Section 101(B)) is amended to add:

Battery Energy Storage System (BESS) (Commercial) – See Appendix: Battery Energy Storage Systems Criteria and Conditions.

I-1 Light Industrial District and I-2 Heavy Industrial District Special Uses are amended to add:

Battery Energy Storage System (BESS) (Commercial) – See Appendix: Battery Energy Storage Systems Criteria and Conditions.

II. Appendix Addition

The following section is added to the Appendix of the Pratt County Zoning Regulations:

APPENDIX: BATTERY ENERGY STORAGE SYSTEM (BESS) CRITERIA AND CONDITIONS

(for Special Use Permits in Agricultural and Industrial Districts)

A. Definitions

Battery: One or more electrochemical cells connected together to provide storage of electrical energy

Battery Energy Storage System (BESS): A facility, with associated equipment, designed to store electrical energy in batteries for later discharge. Includes battery cells, inverters, transformers, fire suppression systems, control systems, collection lines, and associated site improvements.

Tier 1: BESS with an aggregate capacity ≤ 80 kWh (e.g., residential-scale, accessory).

Tier 2: BESS with an aggregate capacity > 80 kWh and < 600 kWh, or systems with multiple technologies in a single enclosure.

Tier 3: BESS with an aggregate capacity > 600 kWh (utility-scale).

Dedicated-Use Building: A building primarily intended to house BESS equipment, classified as Group F-1 occupancy under the IBC.

Decommissioning: The complete removal of all BESS equipment and site restoration to pre-project condition.

Non-Participating Landowner: Any landowner not under lease, easement, or agreement with the BESS developer.

B. Applicability

1. Tier 1 systems are permitted as accessory uses in all zoning districts, subject to building, fire, and electrical codes.
2. Tier 2 and Tier 3 systems require a Special Use Permit under these regulations.
3. Expansions, repowering, or retrofits that increase system capacity or footprint shall comply with these regulations.

C. Development Standards

1. **Setbacks:** BESS shall be setback 100 feet from public roads and property lines; 300 feet from existing residences on non-participating property, unless the owner of the non-participating property waives this setback requirement in writing.
2. **Noise:** Shall not exceed 50 dBA Leq (1-hour) within 50 feet from the outer wall of any non-participating residence. The holder of a special use permit shall provide the Zoning Administrator with compliance testing results prior to the BESS becoming fully operational.
3. **Fencing and Screening:** Tier 2 and Tier 3 must be enclosed by a 7-foot security fence (8-foot if equipment within the BESS exceeds 6 feet in height). Screening is required adjacent to residential uses. The specific screening requirements may be established in the Special Use Permit. A 25-foot landscaped buffer is required along street frontages for Tier 3 unless waived by the County.

4. Lighting: Limited to safety and security; fixtures must be downward-directed and dark-sky compliant.
5. Utility Lines: On-site utility lines shall be placed underground where feasible.
6. Vegetation and Fire Safety: A 20-foot buffer cleared of combustibles must be maintained around Tier 2 and Tier 3 equipment, consistent with NFPA 855.

D. Application Requirements

Applications for a Special Use Permit must include:

1. Legal description and site boundary of the property for which the Special Use Permit is requested.
2. A USGS topographical showing location of the proposed BESS and area within one mile of the facility.
3. A site plan showing the equipment layout, fencing, access roads, substations, utility interconnections, residences within 1,500 feet of the proposed BESS.
4. A site-specific hydrology study and a drainage and stormwater plan prepared by a licensed engineer, providing protection against flooding caused by the development of the property.
5. An environmental resource inventory (showing, at minimum, wetlands, floodplains, and endangered or protected species habitat).
6. A noise study showing the then-present ambient noise levels and modelling noise anticipated result of the operation of the BESS.
7. A fire safety and thermal runaway hazard analysis including a technical description of the proposed BESS; identification of potential modes of failure, thermal runaway initiation scenarios, scope of potential propagation of thermal runaway, off-gas, smoke, explosion toxic release and heat flux hazards, mitigation measures, and safety systems; consequence analysis; and probability assessment.
8. Evidence of agreements necessary to connect the BESS to utility grid.
9. List of all applicable state/federal permits and a disclose of the status of such permits. The processing of an application for a Special Use Permit may be stayed pending the issuance of any other permit for which the Special Use Permit is not a precondition.

10. A toxic and hazardous materials plan specifying (a) toxic and hazardous materials applicant expects to be located on the project site, (b) the expected quantities and locations of such materials, (c) the measures to be used to prevent the disposal of such materials on the project site and escape such materials into the ground or atmosphere, and (d) the anticipated timing and manner of removal of such materials. "Toxic and hazardous materials" means any chemical, electrolyte, gas, or other substance used in, or resulting from, the operation, maintenance, or decommissioning of a Battery Energy Storage System (BESS) that: exhibits or is capable of exhibiting properties of toxicity, flammability, reactivity, or corrosivity; is listed or defined as hazardous or toxic by the U.S. Environmental Protection Agency, OSHA, or the Department of Transportation; or could, if released, pose a hazard to human health, first responders, groundwater, surface water, soil, vegetation, wildlife, or air quality. The term includes, but is not limited to, electrolytes, coolants, solvents, lubricants, off-gassed vapors or by-products (including hydrogen, carbon monoxide, or hydrofluoric acid), and any secondary wastes generated from maintenance, fire suppression, or decommissioning of a BESS. Small sealed consumer batteries or materials integral to portable electronic devices are excluded.

11. A proposed Decommissioning Plan and means of financial assurance to the County and the landowner of the completion of decommissioning.

12. An Emergency Response Plan (ERP) developed with Pratt County Emergency Management and local fire departments. The ERP must include:

- a. Hazard identification (fire, explosion, gas release).
- b. Shutdown and evacuation procedures.
- c. A schedule of inspection/testing of alarms and interlocks.
- d. Safety Data Sheet (SDS)-style response protocols.
- e. Procedures for removal of damaged equipment.
- f. Emergency access routes.
- g. Annual training for local responders funded by the developer.
- h. Compliance documentation (certifications, test reports, or equivalent) shall be submitted with the Special Use Permit application and updated if codes or standards are revised before construction begins.

In the event a BESS Special Use Permit is approved and the BESS is subsequently constructed or proposed be constructed in a manner that would change the noise level modelling, fire safety and thermal runaway hazard analysis, Decommissioning Plan, Emergency Response Plan, or compliance documentation. the holder of the Special Use Permit shall not commence operation of the BESS prior to the approval of revised and updated modelling, plans, or documentation by the Zoning Administrator. In the event such revised and updated information is deemed by the Zoning Administrator to be a material change from the information provided at the time of the approval of the Special Use Permit, the Zoning Administrator may refer the approval decision to the Board of Zoning Appeals.

E. Construction Standards

1. All BESS shall utilize equipment certified in compliance with the standards below and be designed, constructed, operated, and maintained in compliance with the most current editions (as adopted by the State of Kansas or otherwise applicable at the time of permitting) of the following codes and standards, including any successor standards:

NFPA 855 – Standard for the Installation of Stationary Energy Storage Systems

NFPA 70 – National Electrical Code (NEC)

UL 9540 – Standard for Energy Storage Systems and Equipment

UL 9540A – Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems

UL 1973 – Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power, and Light Electric Rail

UL 1741 – Inverters, Converters, Controllers and Interconnection System Equipment

Any other state or federally adopted fire, electrical, or building code provisions applicable to stationary energy storage.

If a conflict arises between local zoning requirements and a referenced code or standard, the more restrictive provision shall apply unless the County, after consultation with the Fire Marshal or Emergency Management Director, determines otherwise.

2. Applicant must coordinate haul routes with the County Road & Bridge Department under a Road Use Agreement and is responsible for all road damage repair.

3. A 24/7 contact person must be provided by the developer.
4. Sites must be maintained and cleaned regularly during construction.
5. If construction has not commenced within 18 months of the approval of a Special Use Permit, or been completed within 36 months of the approval, the County may, after notice and hearing, impose a completion deadline (<180 days) or require partial decommissioning of unfinished facilities.

F. Operational Standards ,

1. BESS facilities must be maintained in good working order.
2. Extraordinary events (fire, explosion, hazardous release) must be reported to the County within 72 hours; 911 must be notified immediately.
3. All equipment must remain UL-listed and NFPA-compliant.
4. A one-line electrical diagram showing system layout, components, interconnection, and NEC-compliant disconnects must be submitted to the County before the BESS becomes operational and must be updated as modifications to the BESS are made.

G. Decommissioning and Abandonment

1. The Decommissioning Plan required with the application shall include a timetable for decommissioning structured by phases, cost estimates for decommissioning (created by an engineer experienced in BESS), restoration measures, and contingencies for removal of intact or fire-damaged systems. If a Special Use permit is approved, the Decommissioning Plan, with and modifications required as a part of the approval shall be binding on the holder of the Special Use Permit and enforceable by the County.
2. Facilities are deemed abandoned after 12 months of non-operation if the developer has not submitted a plan to recommence operation by a specific date approved by the governing body. A single 180-day extension may be granted by the Zoning Administrator for good cause. If the governing body approves a plan to recommence operation by a specific date, the facilities are deemed abandoned if operation has not been recommenced by such date.
3. Decommissioning must be commenced within 6 months and completed within 18 months of abandonment subject to any extension granted by the governing body.
4. Applicant shall provide to the County, through an approved Decommissioning Plan, the right to decommission the BESS in whole at the expense of the applicant upon default of the applicant in decommissioning the BESS, including the right to dispose of any materials without liability to the developer or anyone claiming through the applicant.

H. Financial Security

Prior to the commencement of construction, the applicant must post a surety bond, letter of credit, or escrow in favor of Pratt County in a form acceptable to the county equal to estimated decommissioning costs (without consideration of any salvage value), reviewed every 5 years and adjusted for inflation.

I. Transfer of Permit

Special Use shall not be transferred from one party to a different party without approval of the Governing Body. If the Special Use is to be transferred, the current holder of the Special Use shall inform the second party of the decommissioning funding requirements and all other requirements of the Special Use. The second party or new holder of the Special Use shall meet the escrow account, surety bond, or insurance policy requirements for decommissioning and all other requirements of the Special Use. A transfer request shall be submitted to the Zoning Administrator who shall assess the current compliance of the CSEP with the conditions of the Special Use and other applicable law. If the Zoning Administrator determines the CSEP is in compliance, the transfer application shall be forwarded to the Governing Body for action. A transfer fee of \$100.00 shall be paid to the County.

J. Enforcement

Violations or operation of a BESS other than in compliance with these regulations shall subject to the same enforcement and penalties as other zoning violations under the Pratt County Zoning Regulations in addition to providing the basis termination of the special use permit.

K. Variance

The Board of Zoning Appeals may grant variances per Section 10-107C.

III. Effective Date

This Resolution shall take effect upon publication in the official County newspaper.

Signature Lines

Adopted this 1st day of December, 2025, by the Board of County Commissioners of Pratt County, Kansas.

BOARD OF COUNTY COMMISSIONERS



PRATT COUNTY, KANSAS

By: Thomas W. Bennett
Chair

By: Moore J. Noble
Commissioner

By: Butt N. Shriver
Commissioner

ATTEST: