

# Utility-Scale Solar and Storage Model Ordinance for South Carolina

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## Executive Summary

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South Carolina is rapidly expanding its portfolio of clean energy resources to meet increasing demand. The South Carolina Energy Security Act<sup>1</sup> establishes requirements for solar energy systems at the county level and streamlines local permitting by directing state and local agencies to coordinate, expedite reviews, and issue permits within defined timeframes. In counties that have not yet implemented rural zoning or specific ordinances governing the design and development of solar energy systems, projects larger than 13 acres are subject to state permitting standards until local regulations are adopted. In addition to this framework, it is important to provide a comprehensive set of considerations and resources for both utility-scale solar and battery energy storage systems, supported by robust stakeholder engagement.

This model ordinance provides consensus input on best practices that balance the responsible development of clean energy resources with local county considerations and needs. It is to be used as a resource template rather than a one-size-fits-all rule. It is designed to be adapted and then adopted by local governments across the state, serving as a resource guide for all respective communities. In this way, this model ordinance provides valuable guidance and best practices while still allowing flexibility for local governments who may need to address other local interests.

**This model ordinance is provided for informational and advisory purposes only. It is not intended as legal advice, and users should not rely on it as such. The provisions contained herein may not be suitable for adoption without modification. Local government officials are strongly encouraged to consult with their legal counsel before considering or enacting any ordinance regulating utility-scale solar energy and battery energy storage systems. Each locality should carefully evaluate how the language in this model ordinance may need to be adapted to reflect local conditions, including comprehensive plans, existing land use and zoning regulations, and community priorities.**

This model ordinance was drafted, developed, and vetted with the help of our stakeholders, named below. (\*) indicates organizations who have led and facilitated this process

Carolina Farm Stewardship Association

\*Coastal Conservation League

\*Conservation Voters of SC

Clean Energy Group

Cypress Creek Renewables

Dominion Energy

Donnelley Foundation

EnergyRe

Greenlight America

NC Clean Energy Technology Center

RWE Clean Energy

\*Sierra Club

Silicon Ranch

\*Southern Alliance for Clean Energy

\*Southern Environmental Law Center

\*Upstate Forever

Vote Solar

<sup>1</sup>[SC Energy Security Act Webpage & Legislative Text](#)

# Solar Energy Systems Zoning Ordinance

## Section 1: Purpose

This ordinance is adopted to provide regulations for the installation and operation of solar energy systems in [County], with the following objectives:

- A. To encourage local economic development and employment opportunities.
- B. To preserve the dignity and aesthetic quality of our natural resources and built environment and protect the health, safety, and overall well-being of residents in [County].
- C. To diversify our energy portfolio, expand consumer energy choices, enhance energy reliability and affordability, reduce dependence on imported fuels, and lower electricity costs for residents and businesses by encouraging the use of alternative and sustainable energy sources.

## Section 2: Applicability

- A. This ordinance applies to the siting, permitting, installation, construction, and decommissioning of solar energy systems in which the facility area occupies at least 13 acres within [County] after [effective date of the ordinance].
- B. Solar energy systems installed, constructed, or in operation prior to [effective date of the ordinance] are exempted from this ordinance. Exemption is applicable as long as the fenced acreage and solar energy use remains unchanged. Changes, additions, and expansions that result in an expansion of the fenced acreage, in addition to an increase in system height and the addition of energy storage, shall comply with this ordinance.
- C. This ordinance is not intended to supersede regulations from local, state, and federal agencies. Water and sewer systems must be approved by the South Carolina Department of Environmental Services (SC DES). The site must adhere to the International Building Code at the time of construction and throughout operation.

## Section 3: Definitions

- A. **Solar Energy System:** An energy-generating facility that uses ground-mounted solar photovoltaic panels within an area for the generation of power or energy. This land use activity is commonly referred to as a solar farm. Excluded from this definition are rooftop solar installations or other solar structures that generate power or energy for individual or business use.

- a. Dual-use: Co-location of solar with other land uses, which include but are not limited to active agricultural production, pollinator habitats, aquaculture, or other compatible land uses.
- B. **Facility Area:** The total land area occupied by the operational components of a solar energy system. This includes the perimeter defined by the outermost solar panels, all essential equipment like transformers and inverters, on-site interconnection and energy storage equipment, and any permanent site improvements such as access roads and parking areas. The area excludes vegetative buffers, fencing, and transmission lines extending beyond the system's immediate perimeter.
- C. **Decommission:** The removal and proper disposal of solar energy equipment, facilities, or devices located on real property utilized by or in a solar energy system. This includes the reasonable restoration of the property upon which such solar equipment, facilities, or devices are located, including, but not limited to: soil stabilization and revegetation of the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices.
  - a. "Solar energy equipment" means electrical material, hardware, inverters, conduit, storage devices, footings, braces, stands, or any other equipment to any electric grid equipment associated with the operation of a solar energy system.

## Section 4: Design and Operation Standards

- A. **Panel Height.** Solar panels shall not exceed [15] feet in height, not including interconnection poles, substation equipment, or other necessary devices.
  - a. Dual-use solar systems – such as installations combined with active agricultural production, pollinator habitats, aquaculture, or other compatible land uses – may receive an exemption from the height limitation. Approval of such exemptions shall be subject to review by the [Building / Planning] Department or their designee, and may include conditions to ensure continued land use compatibility, safety, and site aesthetics (*see Appendix A for more information about South Carolina's Coastal Management Program policies and procedures*).
- B. **Setbacks.** All buildings, structures, equipment, and parking areas related to the solar energy system shall be located at a distance of at least:
  - a. [50] feet from all property lines and public rights-of-way adjacent to the Facility Area at the time of application submission, or the required setback for the applicable zoning district, whichever is greater.
  - b. [100-200] feet from the nearest residence, school, or religious facility in existence at the time of application submission, or the required setback from the property line of the solar energy facility to abutting property lines for the applicable zoning district, whichever is greater. The distance may be reduced or waived in written agreement by the owner of the adjacent or participating property or residence.

- c. Roads to the facility as well as utility easements are exempt from this requirement.

C. **Lighting.** Exterior lighting of a solar energy facility shall:

- a. be limited to the minimum reasonably necessary for its safe operation;
- b. be directed downward where reasonably feasible; and
- c. incorporate full cut-off fixtures

D. **Buffers.**

- a. **Vegetative buffers.** The perimeter adjacent to residences, religious buildings, and public rights-of-way shall be screened by a continuous vegetative buffer. This buffer shall reach at least [6] feet in height over a three-year growing season and not less than [15] feet in height at maturity. The vegetation must be planted in two staggered rows, spaced [8] feet to [10] feet apart on center. Existing trees and vegetation can fulfill these requirements as long as it meets the specified height.
- b. **Wetland buffers.** The solar energy system shall comply with [County]'s [wetland protection ordinance / wetland buffer ordinance / critical line buffer and setback ordinance] if applicable.
- c. **Vegetation.** Native evergreens, shrubs and a mix of slow and fast growing seed mixes are recommended for planting (*see Appendix A for technical guidance on pollinator preparation and planting*). The use of plant species listed by the United States Department of Agriculture as major invasive species of concern in South Carolina is prohibited.
- d. **Tree removal.** Preserving any existing tree or group of trees is encouraged. The removal of trees or natural vegetation for a solar energy system shall comply with the best management practices of the South Carolina Forestry Commission and [County]'s tree removal ordinance.

*Nothing prevents a developer from participating in the voluntary solar habitat certification program or conducting a solar suitability analysis. See Appendix A for more details.*

- E. **Glare Prevention.** Solar collectors shall be designed with anti-reflective coating to minimize glare. Textured glass is optional. Mirrors are prohibited.
- F. **Fencing.** A security fence, at least [6-8] feet high, must enclose all solar panels and be situated within the vegetative buffer. Wildlife-permeable fencing is encouraged and must incorporate at least a [6] inch by [6] inch gap at the base to allow passage for small to medium-sized animals. See Appendix A for more information and recommendations on wildlife-permeable fencing and passageways.
- G. **Signage.** A warning sign concerning voltage must be placed at the main gate to include the address and name of the solar energy system operator and a local, 24-hour phone number for the solar farm operator in case of an emergency. The sign should meet all

Occupational Safety and Health Administration (OSHA) and National Electrical Code (NEC) requirements.

#### H. Decommissioning.

- a. **Decommissioning plan.** Prior to obtaining a building permit, the applicant must submit and record a decommissioning plan, signed by the party responsible for decommissioning, with the County Register of Deeds. The decommissioning plan shall be reviewed by staff for compliance with the requirements below prior to any party signatures and recordation of the document in the Register of Deeds. The decommissioning plan shall include the following:
  - i. List the types and anticipated life of panels, storage facilities, and materials to be used at the solar energy facility.
  - ii. Restoration plan to properly restore and re-stabilize the property for future use.
  - iii. Removal of solar panels, buildings, cabling, electrical components, roads, debris, and any other associated facilities and filling and compacting of excavations, trenches, and borings. For foundation used to support devices, transformers, or substations installed on the property the party responsible shall clear, clean, and remove any foundation and cables to a depth of at least three feet below the surface grade of the land, and ensure that each hole (e.g. excavations, trenches, and borings) is filled with a similar type of soil or predominant soil found on the property, and compacted.
  - iv. Materials must be reused and recycled whenever practicable, and both hazardous and non-hazardous waste must be disposed of appropriately.
  - v. Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no power production for twelve (12) consecutive months, abandonment, etc.); provided, however, that periods of non-operation resulting from routine maintenance, equipment replacement, system upgrades, expansions, or construction activities associated with the continued operation or improvement of the facility shall not be considered abandonment or trigger decommissioning requirements.
  - vi. The timeframe for completion of decommissioning activities. The maximum time permitted for decommissioning and restoring the site shall be six months for projects under 500 acres and one year for projects over 500 acres.
  - vii. Written agreement (e.g., lease) with the landowner regarding decommissioning.
  - viii. The identification of the party responsible for decommissioning.
  - ix. Estimated cost of site restoration prepared by a South Carolina-licensed professional engineer.
  - x. Plans for periodically updating the decommissioning plan.

- xi. Adherence to Regulation 61-107.20 managed by SC DES, if applicable to the solar energy system.<sup>2,3</sup>

**b. Financial assurance.**

- i. Prior to issuance of a building permit, the applicant must provide the county with one or more of the following financial assurance mechanisms: cash, insurance, trust funds, surety bonds, letters of credit, certificates of deposit, and financial tests in the amount of [125]% of the estimated decommission cost minus the salvageable value, or \$[50,000], whichever is greater. Estimates shall be determined by a South Carolina-licensed professional engineer.
- ii. All performance bonds must renew automatically; provide a minimum [90]-day notice to the county prior to cancellation; be approved by the Planning Director or their designee; and be provided by a company on the U.S. Department of Treasury's Listing of Certified Companies.
- iii. Every five years from the initial submission of the decommissioning plan, or within one month from a change in ownership of a solar energy system, a new estimate of the probable cost of decommissioning, prepared by a South Carolina-licensed professional engineer, shall be provided to the Building Department to account for changes in decommissioning cost, inflation, and salvage value. Based on this updated estimate, the required bond, letter of credit, or other approved financial security shall be adjusted accordingly, either upward or downward, to accurately reflect the current potential cost of decommissioning.
- iv. The mechanism used to demonstrate financial assurance under this section shall ensure that the funds necessary to meet the costs of closure and corrective action for known releases will be available whenever needed.
- v. Where applicable, the financial assurance mechanism must comply with 61-107.20 administered by the Department of Environment Services. Proof of compliance with state financial assurance requirements may satisfy this ordinance if approved by the County.<sup>2</sup>

**c. Abandonment.**

- i. Should a solar energy facility cease to produce energy on a continuous basis for [12] months, it will be considered abandoned unless the current responsible party (or parties) with ownership interest in the solar energy facility provides substantial evidence (updated every three months after [12] months of no energy production) to the [Building / Planning] Department or their designee of the intent to maintain and reinstate the operation of that facility.
- ii. Upon determination of abandonment, the [Building / Planning] Department or their designee shall notify the party (or parties) responsible

<sup>2</sup>Minimum standards for decommissioning and financial assurance are established by the South Carolina Department of Environmental Services under South Carolina Code of Regulations 61-107.20. Applicants and officials should refer to 61-107.20 for additional state requirements

<sup>3</sup>[South Carolina Department of Environmental Services Solar Panel End-of-Life Management](#)

- that they must remove the solar energy facility and properly restore or stabilize the property for future use, per the decommissioning plan.
- iii. If the responsible party (or parties) fails to comply after [six (6)] months from the date of notice has passed, the county may pursue all actions available at law or in equity, including, but not limited to; breach of contract, specific performance, mandatory injunctions, fines, abatement, nuisance, liens, assessments and judicial sale of the property.

*In the event a landowner and owner(s) of the solar energy facility decide to re-energize the site after the life of the project, a new decommissioning plan and financial assurance mechanism must be put in place following the steps listed under Subsection H. Decommissioning above.*

## **Battery Energy Storage Systems Zoning Ordinance**

### **Section 1: Purpose**

This ordinance is adopted to provide regulations for the installation and use of battery energy storage systems in [County], with the following objectives:

- A. To encourage local economic development and employment opportunities.
- B. To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forest, wildlife and other protected resources and to protect the health, safety, and overall wellbeing of residents in [County].
- C. To diversify our energy portfolio, expand consumer energy choices, enhance energy reliability and affordability, provide resilient backup power in the event of an outage, and lower electricity costs for residents and businesses by encouraging the use of in-state alternative and sustainable energy sources.

### **Section 2: Applicability**

- A. This ordinance applies to all battery energy storage systems (i.e. co-located or standalone storage systems) permitted, installed, constructed, modified, and decommissioned within [County] with a rated nameplate capacity of equal or greater than 1,000 kilowatts (1 megawatt) and duration of discharge equal to or greater than 3 hours after [effective date of the ordinance].
- B. Battery energy storage systems installed, constructed, modified or in operation prior to [effective date of the ordinance] are exempted from this ordinance.

- C. This ordinance is not intended to supersede regulations from local, state, and federal agencies.

### Section 3: Definitions

- A. **Battery Energy Storage System (BESS):** Electrochemical devices that charge, or collect, energy from the grid or a generation facility, store that energy, and then discharge that energy at a later time to provide electricity or other grid services.
- B. **National Fire Protection Association (NFPA):** 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
- C. **National Electric Code (NEC):** A set of standards (also known as **NFPA 70**) 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.
- D. **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. This standard is revised annually and the most recent edition of this standard applies at the time of commissioning.
- E. **UL 9540:** A standard for Energy Storage Systems (ESS) and Equipment. It is designed to ensure the safety of these systems and covers their construction, performance, and testing requirements. UL 9540 certification is essential for verifying that energy storage systems, such as batteries and related equipment, meet rigorous safety standards to prevent hazards related to electrical, mechanical, and environmental conditions.
- F. **Institute of Electrical and Electronics Engineers (IEEE) 1547:** This standard provides the technical guidelines and requirements for interconnecting distributed energy resources, including BESS, with the electric power system to ensure grid stability and safety.



- G. **Decommission:** The removal and proper disposal of battery energy storage equipment, facilities, or devices located on real property utilized by or in a battery energy storage system. This includes the reasonable restoration of the property upon which such battery energy storage equipment, facilities, or devices are located, including, but not limited to: soil stabilization and revegetation of the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices.

## **Section 4: Design and Siting Standards**

### **A. Setbacks.**

- a. Battery energy storage systems shall comply with NFPA 855 requirements related to setbacks and buffers identified in Chapter 9. <sup>4</sup>
- b. An applicant may request a waiver of these requirements under circumstances in which an engineered solution may satisfy setback requirements outlined in NFPA 855.

### **B. Lighting.**

- a. Battery energy storage systems shall comply with NFPA 855 requirements related to lighting. <sup>5</sup>

### **C. Security and Screening.**

- a. Battery energy storage systems shall have a perimeter fence of at least [6-8] ft. in height, consistent with requirements established in NFPA 70. <sup>6</sup>
- b. Battery energy storage systems shall also comply with specifications established in NFPA 855 relating to barriers and buffering. <sup>7</sup>

### **D. Noise.**

- a. The average noise generated from the battery energy storage systems, components, and associated ancillary equipment, measured at the nearest building, lot line that can be built upon, or public way, shall not exceed any auditory limits established for each land use zone.

- E. **Signage.** Signage shall be posted at main access points, on system enclosures, and near the main disconnect or emergency shutdown controls, and shall remain clearly visible and legible, identifying system components, hazards, and emergency procedures.

## **Section 5: Permitting and Environmental Compliance**

### **A. Site Plan Applications.**

A site plan application shall include the following information:

1. Property lines and physical features, including roads, for the project site.
2. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

3. Zoning district designation for the parcel(s) of land comprising the project site.

**B. Special / Conditional Use Permits.**

- a. Applications for special use or conditional use permits shall be considered and approved in accordance with Section [XXX] of [County] ordinances.

**C. Environmental Compliance.**

- a. An applicant shall comply with, and receive the necessary permits for, relevant state environmental and wildlife laws prior to commencing construction and operation of the battery energy storage system.<sup>8</sup>

## **Section 6: Commissioning, Safety Standards, and Certifications**

**A. Commissioning Plan.**

Prior to issuance of a building permit, battery energy storage system applicants shall submit a commissioning plan that contains:

1. An electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.
2. A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and major electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of the building permit.
3. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system. Such information of the final system installer shall be submitted prior to the issuance of building permit.
4. A commissioning report meeting the requirements of NFPA 855 section 6.1.5 and interconnection agreement, as appropriate, shall be submitted prior to final inspection.

**B. Safety Requirements.**

- a. Battery energy storage systems shall comply with the latest published version of NFPA 855, Standard for Installation of Stationary Energy Storage Systems, and any other applicable IEEE and UL requirements at the date of the submission of the application.<sup>9</sup>
- b. Prior to issuance of a building permit, battery energy storage system applicants are required to:
  - i. Submit an emergency response and evacuation plan as an appendix to the project application, which shall do the following:
    1. Establish response procedures for equipment malfunctions or failures.

<sup>8</sup>During normal operations, BESS do not create any emissions or discharge any pollutants. During rare instances of an incident or operational errors, **NFPA 855** details requirements related to the containment of any potential hazards, including spill control measures.

<sup>9</sup>The International Fire Code (IFC) is harmonized with NFPA 855.

2. Include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, the environment, and for establishing shelter-in-place orders and road closure notifications when appropriate.
  3. Establish notification, communication, and coordination procedures between the battery energy storage system and local emergency management officials.
  4. Consider actions to address potential offsite impacts, including, but not limited to, poor air quality and threats to municipal water supplies and surface and groundwater sources.
- ii. Submit a plan as an appendix to the project application for offering site-specific training to the fire service and emergency personnel of jurisdiction prior to commencing operation.
  - iii. Conduct hazard mitigation analyses if specified by NFPA 855.

### **C. Equipment Certification**

- a. All batteries integrated within the battery energy storage system shall be listed under UL 1973. The battery energy storage system shall be listed in accordance with UL 9540, either from the manufacturer or by field evaluation.

## **Section 7: Decommissioning**

### **A. Decommissioning plan.**

- a. Prior to obtaining a building permit, the applicant shall submit and record a decommissioning plan, signed by the party responsible for decommissioning, with the County Register of Deeds. The decommissioning plan shall be reviewed by staff for compliance with the requirements below prior to obtaining any party signatures and recording the document in the Register of Deeds. The decommissioning plan shall include the following:
  - i. List the types and anticipated service life of batteries, enclosures, inverters, transformers, fire suppression systems, and other materials and components to be used at the battery energy storage facility.
  - ii. Restoration plan to properly restore and re-stabilize the property for future use.
  - iii. Removal of batteries, enclosures or containers, inverters, transformers, switchgear, cabling, electrical components, access roads, fencing, foundations, fire suppression systems, monitoring equipment, debris, and any other associated facilities. For any foundations, pads, or support
  - iv. structures used to house or support batteries, inverters, transformers, or substations installed on the property, the responsible party shall clear, clean, and remove such foundation materials and underground cables to a depth of at least three feet below the surface grade of the land. Each resulting hole, trench, or excavation shall be backfilled with a similar type

of soil or predominant soil found on the property and compacted to restore the pre-construction grade and soil stability.

- v. Materials must be reused and recycled whenever practicable, and both hazardous and non-hazardous waste must be disposed of appropriately.
- vi. Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no operation or energy dispatchments for twelve (12) consecutive months, abandonment, etc.); provided, however, that temporary cessation of operations due to routine maintenance, equipment replacement, system upgrades, repowering, battery module swaps, or construction activities associated with the continued operation or improvement of the facility shall not constitute abandonment or trigger decommissioning requirements. Planned idle periods for operational, regulatory, or testing purposes shall also not trigger decommissioning.
- vii. The timeframe for completion of decommissioning activities. The maximum time permitted for decommissioning and restoring the site shall be one year.
- viii. Written agreement (e.g., lease) with the landowner regarding decommissioning.
- ix. The identification of the party responsible for decommissioning.
- x. Estimated cost of site restoration prepared by a South Carolina-licensed professional engineer.
- xi. Plans for periodically updating the decommissioning plan.
- xii. Where applicable for solar energy systems that include battery energy storage systems, the plan must comply with 61-107.20 administered by the Department of Environment Services.<sup>2,3</sup>

#### **B. Financial assurance.**

- a. Prior to issuance of a building permit, the applicant shall provide the county with one or more of the following financial assurance mechanisms: cash, insurance, trust funds, surety bonds, letters of credit, certificates of deposit, and financial tests in the amount of [125] % of the estimated decommission cost minus the salvageable value, or \$[50,000], whichever is greater. Estimates shall be determined by a South Carolina-licensed professional engineer.
- b. All performance bonds shall renew automatically; provide a minimum [90]-day notice to the county prior to cancellation; be approved by the Planning Director or their designee; and be provided by a company on the U.S. Department of Treasury's Listing of Certified Companies.
- c. Every five years from the initial submission of the decommissioning plan, or within one month from a change in ownership of a battery energy storage system, a new estimate of the probable cost of decommissioning, prepared by a South Carolina-licensed professional engineer, shall be provided to the Building Department. Based on this updated estimate, the required bond, letter of credit, or other approved financial security shall be adjusted accordingly, either upward or downward, to accurately reflect the current potential cost of decommissioning.

<sup>2</sup>Minimum standards for decommissioning and financial assurance are established by the South Carolina Department of Environmental Services under South Carolina Code of Regulations 61-107.20. Applicants and officials should refer to 61-107.20 for additional state requirements

<sup>3</sup>South Carolina Department of Environmental Services Solar Panel End-of-Life Management

- d. Where applicable for solar energy systems that include battery energy storage systems, the financial assurance mechanism must comply with 61-107.20 administered by the Department of Environment Services.<sup>2</sup>

**C. Abandonment.**

- a. Should a battery energy storage system cease operation or energy dispatch on a continuous basis for twelve (12) consecutive months, it shall be considered abandoned unless the current responsible party (or parties) with ownership interest in the system provides substantial evidence to the [Building / Planning] Department or their designee of the intent to maintain and reinstate operation of the facility, with such evidence updated every three (3) months following the initial twelve (12) months of non-operation. Temporary cessation of operations due to routine maintenance, equipment replacement, system upgrades, repowering, battery module swaps, or construction activities associated with the continued operation or improvement of the facility shall not constitute abandonment or trigger decommissioning requirements. Planned idle periods for operational, regulatory, or testing purposes shall also not trigger decommissioning.
- b. Upon determination of abandonment, the [Building / Planning] Department or their designee shall notify the party (or parties) responsible that they shall remove the system and properly restore or stabilize the property for future use, per the decommissioning plan.
- c. If the responsible party (or parties) fails to comply after [six (6)] months from the date of notice has passed, the county may pursue all actions available at law or in equity, including, but not limited to; breach of contract, specific performance, mandatory injunctions, fines, abatement, nuisance, liens, assessments and judicial sale of the property.

<sup>2</sup>Minimum standards for decommissioning and financial assurance are established by the South Carolina Department of Environmental Services under South Carolina Code of Regulations 61-107.20. Applicants and officials should refer to 61-107.20 for additional state requirements

## Appendix A: Resources

1. American Clean Power Association: [Utility-Scale Battery Energy Storage Systems Model Ordinance](#)
2. American Clean Power Association: [NFPA 855: Improving Energy Storage System Safety](#)
3. Carolinas Clean Energy Business Association: [The Economic Impact of the Solar Industry in South Carolina](#)
4. Clean Air Task Force: [Community Benefits Programs & Clean Energy](#)
5. National Renewable Energy Laboratory: [The 5 Cs of Agrivoltaic Success Factors in the United States: Lessons From the InSPIRE Research Study](#)
6. New York State Energy Research and Development Authority: [New York Battery Energy Storage System Guidebook](#).
7. North Carolina Clean Energy Technology Center: [Carolinas Development Assistance and Siting Hub](#)
  - a. [North Carolina and South Carolina Local Ordinance Database](#)
8. North Carolina Clean Energy Technology Center: [Template Solar Energy Development Ordinance for North Carolina](#)
9. North Carolina Pollinator Conservation Alliance: [North Carolina Technical Guidance for Native Plantings on Solar Sites](#)
10. South Carolina Department of Environmental Services: [Coastal Zone Management Plan Policies & Procedures](#)
11. South Carolina Department of Environmental Services: [The Georgia Model Solar Zoning Ordinance](#).
12. South Carolina Department of Environmental Services: [The New York Solar Guidebook](#).
13. South Carolina Department of Natural Resources: [Solar Siting Tool](#).
14. South Carolina Department of Natural Resources: [South Carolina Solar Habitat Act](#).
15. The Nature Conservancy: [Principles of Low-Impact Solar Siting and Design](#).

## **Appendix B: Community Engagement Best Practices for Developers**

### **Engage Early**

1. Begin outreach before permit applications or final route/site selections
2. Explain the purpose and need for the project in plain language to the community
3. Be transparent with the timeline, including decision points and public input opportunities

### **Prioritize Transparency & Two-Way Communication**

1. Give clear, consistent updates (i.e., websites, local media, etc.)
2. Be honest about trade-offs, and be clear about what is and isn't open for negotiation

### **Respect Local Knowledge & Lived Experience**

1. Involve landowners, community leaders, and local organizations from the start
2. Incorporate feedback into design decisions
3. Host listening session to understand concerns around land use, health, and equity
4. Consider local benefits mechanisms to support community development

### **Make Engagement Inclusive & Accessible**

1. Schedule events at convenient times and locations
2. Offer language interpretation and ADA accommodations
3. Provide printed materials and virtual participation options for rural or under-connected communities

### **Stay Engaged After Groundbreaking**

1. Designate a community liaison for ongoing communication through construction and operations
2. Provide regular updates on progress and mitigation
3. Establish a system for feedback, complaints, or questions to be heard and addressed promptly

### **Examples of Successful Engagement Tools**

1. Community Advisory Committees
2. Interactive Project Maps & Dashboards
3. Pop-up Info Booths at Local Events
4. Landowner Working Groups
5. Co-hosted Town Halls with Local Leaders

*Developers, in partnership with counties, are encouraged to consult with local soil and water conservation districts and farmland protection boards/advisory committees when reviewing proposed projects to ensure siting decisions align with long-term working lands conservation goals.*

**Based on best practices from:** U.S. Department of Energy, National Renewable Energy Laboratory (NREL), Lawrence Berkeley National Laboratory, & SEIA and National Association of Regulatory Utility Commissioners (NARUC)

## **Appendix C: Common Permits for Clean Energy Projects**

### **Federal**

- National Environmental Protection Act Study (NEPA)- covers the entire environmental picture of the site
- Environmental Survey Assessment (Phase I ESA)
- Wetland Delineation
- Agency permits (US Army Corp of Engineers and US Fish & Wildlife Service)

### **State**

- Archaeological Study submitted to the State Historic Preservation Office
- Decommissioning Plan submitted to the Department of Environmental Services
- Project must go through a utility's Request for Proposal (RFP) process (9 months)
- Obtain interconnection agreement with utility (takes 2 years for all the studies)
- Obtain Certificate of Public Convenience and Necessity (CPCN) from the Public Service Commission (PSC) for projects above 75 MW
- Obtain Certificate of Environmental Compatibility and Public Convenience and Necessity (CECPCN) for projects connecting to a 230 kV transmission line

### **Local**

- Health & Safety Report
- Decommissioning Plan submitted to County Council
- Permitting process with local jurisdiction
- Construction & Electrical Building Permits
- Fee in lieu of tax agreements with the County (or PILOT-Payments in lieu of taxes)