AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF SUSSEX COUNTY, VIRGINIA, CONCERNING THE REGULATION OF ACCESSORY BATTERY ENERGY STORAGE PROJECTS

WHEREAS, the Board of Supervisors of Sussex County, Virginia is authorized pursuant to the laws of the Commonwealth of Virginia to adopt and amend zoning regulations to promote the health, safety, and general welfare of the public; and

WHEREAS, the Board desires to establish clear and uniform zoning standards for accessory battery energy storage systems to provide for their safe installation, operation, maintenance, and decommissioning; and

WHEREAS, accessory battery energy storage systems can support energy reliability, resilience, and efficiency for principal uses while requiring reasonable standards to address land use compatibility, fire safety, emergency response, and other public welfare considerations; and

WHEREAS, the proposed Zoning Text Amendment establishes definitions, use regulations, performance standards and other provisions applicable to accessory battery energy storage systems; and

WHEREAS, the Board finds that the proposed Zoning Text Amendment is consistent with applicable state law, furthers the purposes of the zoning ordinance, and promotes the public health, safety, and general welfare of the community.

NOW, THEREFORE, BE IT ORDAINED by the Board of Supervisors of Sussex County, Virginia, that the Zoning Ordinance is hereby amended as follows:

§ 1.

Sec. 34-907. Zoning districts

(d) Battery facilities as a primary use shall be subject to a conditional use permit and permitted ~~as follows~~ on parcels contiguous to utility-scale solar facilities, other energy generation facilities, and substations. Accessory battery energy storage projects are permitted by-right when within the boundaries of parcels included in a utility-scale solar project with a valid and approved conditional use permit and with a capacity no more than 100% of the rated capacity of the solar facility.

Battery Facility	General Agricultural A-1	*Limited Industrial I-1*	*General Industrial I-2*	*Residential Multi-Family R-1*
Primary use	CUP	CUP	CUP	-
Accessory use	By right	By right	By right	

Sec. 34-915. Special provisions for Accessory Battery Energy Storage Projects.

Accessory Battery Energy Storage Projects. Battery Energy Storage Projects, as defined herein, shall be considered an accessory use to an approved utility-scale solar facilities, and are only permitted within the boundaries of parcels included in a utility-scale solar project with a valid and approved conditional use permit in accordance with Section 15.2-2316.10 of the Code of Virginia, as amended. Accessory Battery Energy Storage Projects shall follow the additional requirements as outlined herein.

Sec. 34-916. Site Design.

To minimize impacts to adjacent properties and maximize buffers, Accessory Battery Energy Storage Projects shall:

(a) Be sited toward the interior of the fenced project area of the solar facility to include any fenced areas associated with the point of interconnection, and/or switchyard and substation components to the extent practicable to buffer the facility from the surrounding areas;

(b) Be placed on an appropriate foundation;

(c) Have a 20-foot minimum buffer within the fenced area of the facility, located between the project components and the fencing;

(d) Take advantage of existing topography, structures, and vegetation to provide extra screening; and

(e) Be sited to avoid wetlands, floodplains, and any other environmental concerns.

Sec. 34-917. Land Disturbance and Storm Water Management for Accessory Battery Energy Storage Projects.

Accessory Battery Energy Storage Projects shall comply with the most recent state policies and regulations for stormwater control applicable at the time of design and construction. To help reduce stormwater impacts, impervious surfaces shall be minimized on site.

Sec. 34-918. Compliance with Building Codes, Electrical Codes, and Other Regulatory Requirements.

Accessory Battery Energy Storage Projects shall be constructed, maintained, and operated in accordance with all applicable local, state, and federal codes and standards, including but not limited to applicable fire, electrical, and building codes adopted by the County; National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems; Underwriters Laboratories (UL) 9540A, Standard for Test Method for Evaluating

Thermal Runway Fire Propagation in Battery Energy Storage Systems; and Virginia's stormwater management and erosion and sediment control requirements. Applicable requirements are those in effect at the time of construction and equipment installation and based upon the type of facility proposed.

Sec. 34-919. Installation and Design; Fencing for Accessory Battery Energy Storage Projects.

Battery cells in an Accessory Battery Energy Storage Project shall be placed in a Battery Energy Storage System ("BESS") with a Battery Management System. The BESS shall provide a secondary layer of physical containment to the batteries and be equipped with cooling, ventilation, fire alarm, fire and heat monitoring, and fire suppression and detection systems as required by applicable federal, state, or local codes or regulations. Further, accessory battery energy storage projects shall be enclosed by security fencing which shall comply with the current NFPA 855 requirements at the time of site plan submission.

Sec. 34-920. Setbacks.

Accessory Battery Energy Storage Projects, measured from the security fence, shall conform to the following setbacks:

(a) A minimum setback of 150 feet from the center line of any state-maintained road abutting the property;

(b) A minimum setback of 150 feet from all other property lines with the exception of those property lines that are inside the project's boundaries and which do not abut property located outside the project area;

(c) A minimum of 500 feet from the nearest point on the outer wall of existing occupied community buildings, places of assembly, and dwellings on non-participating parcels.

(d) A minimum of 100' from the edge of wetlands, as defined in 9VAC25-830, or from the top of bank of perennial streams as defined in Code of Virginia § 62.1-44.122, or other bodies of water.

Sec. 34-921. Height, Lighting, and Utilities.

(a) *Height.* Accessory Battery Energy Storage Projects shall comply with the building height limitations for principal structures of the underlying zoning district.

(b) *Lighting.* Lighting of Accessory Battery Energy Storage Projects shall be limited to that minimally required for safety and operational purposes and shall meet all requirements of this ordinance.

(c) *Utilities.* All on-site utility lines shall be installed underground to the maximum extent feasible and as allowed by the serving utility. This requirement shall not apply to the main service connection within the utility company's right-of-way or to new interconnection facilities, including, but not limited to, poles and associated equipment located within new easements or rights-of-way.

Sec. 34-922. Screening for Accessory Battery Energy Storage Projects.

The entire Accessory Battery Energy Storage Project, including fencing, shall be screened from ground-level view of adjacent properties by a landscaped buffer zone at least 50 feet wide, consisting of a mix of native evergreen and deciduous species as approved by the Zoning Administrator; a planted berm; preexisting natural or manmade visual barriers or a combination of these methods. Opaque fencing slats of an approved color may be used in combination with other screening methods to enhance screening at the Zoning Administrator's discretion but shall not be the primary method. Existing mature tree growth and natural landforms on the site shall be preserved to the maximum extent possible and may be used in whole or in part to provide the required screening if they provide adequate screening from public view as determined by the Zoning Administrator. In the event that existing vegetation or landforms providing screening are disturbed, new plantings shall be provided which accomplish the same.

Sec. 34-923. Noise Limits for Accessory Battery Energy Storage Projects.

At all times, the solar facility shall comply with the county's noise regulations set forth in Chapter 20, Article III. Applicants shall submit equipment and component manufacturers' noise ratings to demonstrate compliance. The applicant shall be required to provide Operating Sound Pressure Level measurements from a reasonable number of sampled locations at the perimeter of the battery energy storage system to demonstrate compliance with this standard.

Sec. 34-924. Removal of Damaged Components.

Any damaged Accessory Battery Energy Storage Project components or portions thereof shall be collected by the facility operator or owner and removed from the site or stored on site in a location protected from weather and wildlife and from any contact with ground or water until removal from the site can be arranged; storage shall not exceed thirty (30) days. If not returned to the manufacturer, damaged components shall be transferred directly to an approved recycling facility or disposal site in accordance with local, state, and federal laws.

Sec. 34-925. Fire Protection for Accessory Battery Energy Storage Projects and Fire & Safety Coordination.

(a) Fire Protection for Accessory Battery Energy Storage Project Requirements.

(1) *"Non-combustible" Buffer*. A minimum 20-foot "non-combustible" gravel buffer shall be established around the perimeter of Accessory Battery Energy Storage Projects to help prevent the spread of fire and provide access for emergency vehicles if needed. The applicant shall maintain the buffer throughout the life of the facility to ensure it remains free of combustible materials and provides emergency vehicle access.

(2) *Emergency Access.* Access to the property for emergency services shall be provided in a manner acceptable to the Sussex County Zoning Administrator and the Sussex County Public Safety Coordinator or designee.

(3) *Emergency Response.* The facility owner or operator shall provide the Public Safety Coordinator or designee with current contact information, to include a direct phone number, secondary number, and email address, for a designated representative that can provide up-to-date situation reports during an emergency or potential emergency.

(4) The facility owner or operator shall be responsible for updating the contact information on file with the County to ensure it remains current.

   a. In the case of an on-site emergency, the facility owner or operator shall ensure that an owner or operator's representative arrives on site to coordinate with the County's Public Safety Coordinator or designee and/or the incident commander within two hours of receiving notification of the situation.

(5) *Safety Operation Standards.* Accessory Battery Energy Storage Projects shall be constructed, maintained, and operated in compliance with the applicable codes, standards, and regulations identified in Section 34-918. Except where otherwise required or made inapplicable by applicable laws, regulations, or codes, the following standards shall apply:

   a. Each individual battery shall have 24/7 independently monitored automated fire detection and/or fire extinguishing and detection technology built in.

   b. The Battery Management System shall monitor individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access.

   c. The Battery Management System shall be capable of shutting down and isolating batteries not functioning within designed parameters, limiting risk of before thermal runaway.

   d. Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance. Access to the container interior shall not be permitted while the system is in operation.

e. The facility owner or operator shall ensure there is sufficient disconnect and shutdown capability including a master kill switch to disable and discharge batteries.

f. The facility owner or operator shall ensure there is sufficient and appropriate air ventilation and fire suppression systems.

(6) *Emergency Plan.* Accessory Battery Energy Storage facility owner or operator shall provide the County with an Emergency Plan that, at minimum, contains the following:

a. Procedures to be followed in response to notifications provided by the battery energy storage management system that could signify potentially dangerous conditions

b. Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions, including shutting down equipment, de-energizing, or isolating equipment and systems to reduce the risk of fire, electric shock, release of hazardous materials, and personal injuries; 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.

c. Procedures and schedules for conducting drills of procedures a and b.

d. Procedures for safe start-up following cessation of emergency conditions.

e. Procedures for dealing with battery energy storage system components damaged in a fire or other emergency event.

f. A water containment plan to address potentially contaminated water associated with a fire, explosion, or hazardous materials incident.

g. Ensuring there are adequate water sources and fire suppression appliances for the firefighters if required in the emergency response plans

h. Procedures for inspection and testing of associated alarms, interlocks, and controls.

i. Procedures and schedule for training local first responders on the contents of the plan and appropriate response actions.

j. Other practices as recommend by experts or local first responders.

(7) *Warning Signage*. A 911 address sign shall be posted in a clearly visible manner. NFPA 704 placards and appropriate warning signage that complies with NFPA 855 and

identifies the facility owner or operator and a 24-hour emergency contact phone number shall be placed on all entrances.

(8) *Public Safety Information.* The facility owner or operator shall provide safety data sheets that address emergency response safety concerns and extinguishment to the Zoning Administrator and Public Safety Coordinator or designee as part of their fire and safety review and shall provide updated data sheets as needed to ensure information on file with the County is current throughout the life of the project.

(9) *Emergency Response Training*. The facility owner or operator shall coordinate with the Public Safety Coordinator or designee to schedule and conduct training of emergency response personnel regarding system components, site design, potential hazards and risks, and system-specific emergency response plans.

(10) *Inspections.* The facility operator or owner shall conduct regular on-site inspections of the battery units and submit a written report to the zoning administrator on their condition, at least once every six months. The facility operator or owner shall conduct monthly inspections electronically of the battery units and submit a written report to the zoning administrator.

(b) Fire & Safety Coordination for Accessory Battery Energy Storage Projects.

(1) Prior to submitting a site plan and obtaining a land disturbance permit for an Accessory Battery Energy Storage Project, the facility owners, operators, or developers shall schedule a meeting with County staff, including the County Administrator, or designee, Zoning Administrator, and the County's Public Safety Coordinator or designee to discuss the location, scale and nature of the proposed project; fire & safety reviews; and environmental reviews.

Sec. 34-926. Decommissioning of Accessory Battery Energy Storage Projects.

(a) As part of their site plan review, the facility owners or operators, or developers, shall include a decommissioning plan detailing the anticipated life of the project, the estimated decommissioning cost in current dollars, an explanation of how the cost was determined, the method of ensuring funds will be available for decommissioning, a mechanism for calculating increased removal costs due to inflation, and an explanation of the decommissioning process. The decommissioning estimate shall be prepared and stamped by a professional engineer licensed in the Commonwealth of Virginia, who is engaged by the project, with experience in preparing decommissioning estimates and approved by the County. Salvage value shall not be considered when determining the estimated decommissioning cost.

(b) The full estimated decommissioning cost shall be guaranteed by escrow at a federally insured financial institution, irrevocable letter of credit, or surety bond before a building permit is issued for the project. The decommissioning cost guarantee shall remain valid until the facility has been fully decommissioned. If the facility owner or operator fails to remove the installation in accordance with the requirements of this permit or within the proposed date of decommissioning, the County may collect the bond or other surety and the County or hired third-party may enter the property to physically remove the installation.

(c) The decommissioning cost estimate shall be recalculated every five (5) years at the facility owner or operator's expense by a professional engineer licensed in the Commonwealth of Virginia, who is engaged by the project, with experience in preparing decommissioning estimates and approved by the County. If the recalculated estimate exceeds the original estimated decommissioning cost by 10% or more, the facility owner or operator shall increase the guarantee to meet the new cost estimate. If the recalculated estimate is less than 90% of the original estimated cost of decommissioning, the County may approve reducing the guarantee.

(d) Battery Energy Storage Projects which have reached the end of their useful life or have not been in active service for a period of one (1) year shall be removed at the project owner or operator's expense. The period to remove the battery energy storage project may be extended by the Zoning Administrator if evidence is provided that the delay is due to circumstances beyond the facility owner or operator's reasonable control.

(e) Notice shall be provided to the county within 30 days of the sale or transfer of the lease or property, and an up-to-date decommissioning plan and new financial guarantee shall be provided by the new leaseholder or property owner.

(f) The facility owner or operator shall notify the Zoning Administrator by certified mail of the proposed date of discontinued operations and plans for removal.

(g) The facility owner or operator shall have twelve (12) months to complete the decommissioning of the facility.

(h) Decommissioning shall be performed in compliance with the approved final decommissioning plan and shall include removal of all battery energy storage system components, structures, equipment, pads or foundations, cabling, roads, security barriers, transmission lines, and any other associated facilities from the site, so that any agricultural ground upon which the facility and/or system was located is again tillable and suitable for agricultural uses. All materials removed from the property, including hazardous materials, shall be disposed of in accordance with local, state, and federal law. Any contaminated soil, as determined by independent testing, shall be removed and disposed of in accordance with local, state, and federal law. Disturbed earth shall be graded and re-seeded. However,

the landowner may request that access roads, stormwater management features, or other land surface areas not be restored. Approval of such landowner requests shall be at the zoning administrator's discretion.

Secs. 34-927—34-929. Reserved.

ARTICLE I, IN GENERAL, Sec. 34-1, Definitions

Battery energy storage project (battery facility or battery energy storage facility) means a facility comprised energy storage equipment and technology that is capable of absorbing energy, storing such energy for a period of time, and redelivering such energy after it has been stored. Such facilities may include, but are not limited to, battery cells, modules, racks, inverters, power conversion systems, battery management systems, thermal management systems, fire detection and suppression systems, and associated control and safety equipment. A battery energy storage facility may be a principal use or an accessory use to an energy facility, including a solar energy facility.

Accessory battery energy storage project means a battery energy storage facility that is accessory to the principal use of a property and is designed and intended to store energy for use on-site, including for load management, backup power, or integration with on-site energy generation systems. The term includes an accessory battery energy storage project as referenced in § 15.2-2316.10 of the Code of Virginia. Such facilities may be located within a building or as a separate structure or container on the same lot. Supporting equipment commonly includes battery cells, inverters, power conditioning systems, monitoring systems, and safety equipment.

Battery management system means an electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the battery energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.