

ARTICLE LIIC **BATTERY ENERGY STORAGE SYSTEMS** (§ 301-283.18-§301-283.23)

§ 301-283.18 Purpose

- A) Battery Energy Storage System Law is adopted to advance and protect the public health, safety, welfare, and quality of life of The Town of Riverhead by creating regulations for the installation and use of battery energy storage systems, with the following objectives:
- 1) To provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of battery energy storage systems;
  - 2) To ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems;
  - 3) To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources;

§ 301-283.19 Definitions

As used in this Chapter the following terms shall have the meanings indicated:

**ANSI:** American National Standards Institute

**BATTERY(IES):** A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically. For the purposes of this law, batteries utilized in consumer products are excluded from these requirements.

**BATTERY ENERGY STORAGE MANAGEMENT SYSTEM:** An electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

**ENERGY STORAGE SYSTEM:** One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery or an electric motor vehicle. A battery energy storage system is classified as a Tier 1 or Tier 2 Battery Energy Storage System as follows:

- A. Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 600kWh and, if in a room or enclosed area, consist of only a single energy storage system technology.
- B. Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 600kWh or are comprised of more than one storage battery technology in a room or enclosed area.

**CELL:** The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

**COMMISSIONING:** A systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

**DECOMMISSIONING:** A systematic process that provides a narrative and plan for the removal/proper disposal and reclamation of a battery energy storage system, and its site, at the end of its useful life and/or as the result of damage by fire or other event.

**DEDICATED-USE BUILDING:** A building that is built for the primary intention of housing battery energy storage system equipment, is classified as Group F-1 occupancy as defined in the New York State Building Code, and complies with the following:

- 1) The building's only use is battery energy storage, energy generation, and other electrical grid-related operations.
- 2) No other occupancy types are permitted in the building.
- 3) Occupants in the rooms and areas containing battery energy storage systems are limited to personnel that operate, maintain, service, test, and repair the battery energy storage system and other energy systems.
- 4) Administrative and support personnel are permitted in areas within the buildings that do not contain battery energy storage system, provided the following:
  - a. The areas do not occupy more than 10 percent of the building area of the story in which they are located.
  - b. A means of egress is provided from the administrative and support use areas to the public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy system equipment.

**ENERGY CODE:** The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the Energy Law, as currently in effect and as hereafter amended from time to time.

**FIRE CODE:** The fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

**LOT COVERAGE:** lot coverage shall include the total square footage of the perimeter of all of the dedicated use buildings and/or structures housing a battery energy storage system, inclusive of all interior spaces between the dedicated use buildings and or structures housing a battery energy storage system, in addition to driveways and service roads (paved or stone), and all accessory equipment, buildings and structures.

**NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL):** U.S. Department of Labor designation recognizing a private sector organization to perform certification for

certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards.

**NEC:** National Electric Code.

**NFPA:** National Fire Protection Association.

**NON-DEDICATED-USE BUILDING:** All buildings that contain a battery energy storage system and do not comply with the dedicated-use building requirements.

**NON-PARTICIPATING PROPERTY:** Any property that is not a participating property.

**NON-PARTICIPATING RESIDENCE:** Any residence located on non-participating property.

**OCCUPIED COMMUNITY BUILDING:** Any building in Occupancy Group A, B, E, I, R, as defined in the New York State Building Code, including but not limited to schools, colleges, daycare facilities, hospitals, correctional facilities, public libraries, theaters, stadiums, apartments, hotels, and houses of worship.

**PARTICIPATING PROPERTY:** A battery energy storage system host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the battery energy storage system owner (or affiliate) regardless of whether any part of a battery energy storage system is constructed on the property.

**UNIFORM CODE:** the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

#### **§ 301-283.20 Applicability**

- A. The requirements of this Local Law shall apply to all battery energy storage systems permitted, installed, or modified in Town of Riverhead after the effective date of this Local Law, excluding general maintenance and repair.
- B. Battery energy storage systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law.
- C. Modifications to, retrofits or replacements of an existing battery energy storage system that increase the total battery energy storage system designed discharge duration or power rating shall be subject to this Local Law.

#### **§ 301-283.21 General Requirements**

- A. A building permit and an electrical permit shall be required for installation of all battery energy storage systems.
- B. All battery energy storage systems, all Dedicated Use Buildings, and all other buildings or structures that (1) contain or are otherwise associated with a battery energy storage system

and (2) subject to the Uniform Code and/or the Energy Code shall be designed, erected, and installed in accordance with all applicable provisions of the Uniform Code, all applicable provisions of the Energy Code, and all applicable provisions of the codes, regulations, and industry standards as referenced in the Uniform Code, the Energy Code, and the Riverhead Town Code.

**§ 301-283.22 Requirements for Tier 1 Battery Energy Storage Systems**

Tier 1 Battery Energy Storage Systems shall be permitted in all zoning districts, are subject to General Requirements pursuant to § 301-283.21, and are exempt from special permit requirement & site plan review.

**§ 301-283.23 Requirements for Tier 2 Battery Energy Storage Systems**

- A. Tier 2 Battery Energy Storage Systems are permitted through the issuance of a Special Permit by the Town Board pursuant to Article LVII within the Industrial A, Industrial C, Planned Industrial Park, Agricultural Protection, and Residence A-80 zoning use districts and shall be subject to Site Plan Review by the Planning Board pursuant to Article LVI and as follows:
- B. Utility Lines and Electrical Circuitry. All on-site utility lines shall be placed underground to the extent practicable.
- C. Parcels upon which battery energy storage systems are placed shall adhere to the dimensional regulations for the applicable zoning use district with additional standards as set forth below:
- (1) The minimum lot area for all Business and Industrial District parcels proposing Tier 2 Battery Energy Storage systems shall be 40,000 square feet.
  - (2) For all residentially zoned parcels proposing Tier 2 Battery Energy storage, the parcel shall be located within 1,000 feet of an existing LIPA Substation – or – Commercial Solar Energy Production System.
  - (3) The minimum lot size for residentially zoned properties proposing Tier 2 Battery Energy Storage systems shall be 80,000 sq. ft.
  - (4) The maximum lot coverage for Tier 2 Battery Energy Storage Systems shall be 75% in any zone.
  - (5) Maximum height of structures dedicated to Tier 2 Battery Energy Storage Systems shall be 20’.
  - (6) The minimum required side and rear yard setback shall be 10 feet; the minimum side yard setback shall be 25 feet when adjacent to property zoned or containing a residential use.
  - (7) The minimum screening within required yards shall include landscape plantings

to be erected and maintained by the applicant along the front, side and rear property lines; the Planning Board may modify these requirements for screening where the same or better screening effect is accomplished by the natural terrain or foliage.

- (8) Design and visibility. Battery energy storage systems shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the existing terrain, character of the property and surrounding area without interfering with ventilation or exhaust ports.
- (9) Adjoining street right-of-ways
  - (a) The minimum required transitional front yard shall be 20 Feet, unless the Planning Board finds for aesthetic and/or safety reasons that additional setback is necessary.
  - (b) The minimum required screening shall be achieved by landscape plantings, including evergreen shrubs not less than 4ft in height at the time of installation, and deciduous street trees that meet Town specifications.

D. Accessory/Principle Use

- (1) A Tier 2 Battery Storage system shall not be permitted as accessory to the principal use of a residential dwelling.
- (2) Tier 2 battery energy storage systems may be considered accessory when the principle use of a parcel is for the generation of electricity via solar panels.

E. Avoidance Areas. Battery energy storage systems shall not be located in the following avoidance areas:

- (1) Flood Hazard zones, unless compliance with FEMA and can be achieved without significant visual or safety impacts.
- (2) Open space/Greenbelt Areas.
- (3) On parcels containing prime agricultural soils, unless the proposed battery energy storage system can be located on a portion of the parcel containing non-prime agricultural soils.
- (4) Historically and culturally significant resources, unless it can be demonstrated that an installation will not adversely affect the historic resource and is fully reversible.
- (5) Designated conservation areas, including but not limited to lands purchased through the Community Preservation Fund, and properties that are preserved via the purchase of development rights.

- (6) Scenic corridors or viewsheds, unless the installation is fully camouflaged and is found to not compromise the scenic corridor or viewshed.
- (7) Within 150 feet of Town of Riverhead Wetlands, 100 feet of NYSDEC Freshwater Wetlands, or within 300 feet of NYSDEC Tidal Wetlands.

F. Submission. A complete site plan pursuant to Article LVI and Special Permit requirements pursuant to Article LVII and as follows:

- (1) Name, address, phone number, and signature of the project applicant, as well as the property owners, demonstrating their consent to the application and the use of the property for the battery energy storage system.
- (2) A one- or three-line electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all National Electrical Code compliance disconnects and over current devices.
- (3) A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.
- (4) Commissioning plan. Such plan shall document and verify that the system and its associated controls and safety systems are in proper working condition per requirements set forth in the Uniform Code. Where commissioning is required by the Uniform Code, battery energy storage system commissioning shall be conducted by a New York State (NYS) licensed professional engineer after the installation is complete but prior to final inspection and approval. A corrective action plan shall be developed for any open or continuing issues that are allowed to be continued after commissioning. A report describing the results of the system commissioning and including the results of the initial acceptance testing required in the Uniform Code shall be provided to the Planning Board prior to final inspection and approval and maintained at an approved on-site location.
- (5) Fire safety compliance plan. Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with the Uniform Code.
- (6) Operation and maintenance manual. Such plan shall describe continuing battery energy storage system maintenance and property upkeep, as well as design, construction, installation, testing and commissioning information and shall meet all requirements set forth in the Uniform Code.
- (7) Erosion and sediment control and stormwater management plans prepared to New York State Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board in consultation with the Town Engineer

## G. Fencing Requirements

- (1) Battery energy storage systems, including all mechanical equipment and buildings dedicated to battery energy storage systems shall be enclosed by a privacy fence, with the design subject to Planning Board discretion, to a maximum height of six feet with a self-locking gate, to prevent unauthorized access and shall not interfere with ventilation or exhaust ports.
- (2) All required fencing shall comply with front yard setbacks pursuant to the table of dimensional regulations for the applicable zoning district.
- (3) The Planning Board shall require landscaping located between the fence and the surrounding properties, including the public right-of-way as appropriate and necessary.

## H. Signage.

- (1) The signage shall be in compliance with ANSI Z535, and all other applicable codes, and shall include the type of technology associated with the battery energy storage systems, any special hazards associated, the type of suppression system installed in the area of battery energy storage systems, and 24-hour emergency contact information, including reach-back phone number.
- (2) As required by the NEC, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.

I. Lighting. Lighting of the battery energy storage systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties. All lighting shall comply with **Article XLIX Exterior Lighting of the Riverhead Town Zoning Code.**

J. Noise. The one-hour average noise generated from the battery energy storage systems, components, and associated ancillary equipment shall comply with noise standards found in **Chapter 251: Noise, Public Nuisances and Property Maintenance.** Applicants may submit equipment and component manufacturer's noise ratings to demonstrate compliance. The applicant may 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.

K. Vegetation and tree-cutting. Areas within 10 feet on each side of Tier 2 Battery Energy Storage Systems shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt provided that they do not form a means of readily transmitting fire. Removal

of trees should be minimized to the extent possible.

L. Prior to the issuance of a Building Permit, All Application shall include an Emergency Operations Plan. A copy of the approved Emergency Operations Plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The emergency operations plan shall include the following information:

- (1) 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.
- (2) Emergency Contact information for the owner & operators, with 24 hour contacting information, which must be kept current.
- (3) Procedures for inspection and testing of associated alarms, interlocks, and controls.
- (4) Procedures to be followed in response to notifications from the Battery Energy Storage 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.
- (5) 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. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.
- (6) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.
- (7) Procedures for dealing with battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged battery energy storage system equipment from the facility.
- (8) Other procedures as determined necessary by the Planning Board to provide for the safety of occupants, neighboring properties, and emergency responders.
- (9) Procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures

M. Ownership changes. If the owner of the battery energy storage system changes or the



owner of the property changes, the special exception approval shall remain in effect, provided that the successor, owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, and decommissioning plan. A new owner or operator of the battery energy storage system shall notify the Planning Department, Building Department, and Fire Marshal's Office of such change in ownership or operator in writing within 30 days of the ownership change. All permits and approvals for the battery energy storage system shall be void if a new owner or operator fails to provide written notification to the Planning Department within the required timeframe. Reinstatement of a voided special permit/site plan will be subject to approval process for new applications.

N. Decommissioning. All site plan applications shall include a decommissioning plan. The decommissioning plan shall include the following:

- (1) A narrative description of the activities to be accomplished, including who will perform that activity and at what point in time, for complete physical removal of all battery energy storage system components, structures, equipment, security barriers, transmission lines, access roads and other related improvements from the site;
- (2) A detailed narrative and plan for the disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations;
- (3) The anticipated life of the battery energy storage system;
- (4) The estimated decommissioning costs, prepared by a licensed professional engineer and how said estimate was determined;
- (5) The method of ensuring that funds will be available for decommissioning and restoration;
- (6) The method by which the decommissioning cost will be kept current;
- (7) The manner in which the site will be restored, including a description of how any changes to the surrounding areas and other systems adjacent to the battery energy storage system, such as, but not limited to, structural elements, building penetrations, means of egress, and required fire detection suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed.
- (8) A listing of any contingencies for removing an intact operational energy storage system from service, and for removing an energy storage system from service that has been damaged by a fire or other event.
- (9) The Owner and/or operator of the energy storage system shall implement said plan upon abandonment and/or in conjunction with removal from the facility

O. Decommissioning Fund. The owner and/or operator of the battery energy storage system

shall continuously maintain a fund, either through escrow account, bond or otherwise payable to the Town of Riverhead, in a form and amount approved by the Town Engineer or the Town's Consulting Engineer for the decommissioning and removal of the battery energy storage system, for the period of the life of the facility. All costs of the financial security shall be borne by the applicant.

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