Sec. 1. Repeal

The following are repealed:

(1) § 199-10.4, relating to Solar Photovoltaic Installations; and

(2) 199-9.12, relating to Standards for Solar Photovoltaic Installations.

Sec. 2. § 199-9.12.1 is added as follows:

§ 199-9.12.1 Solar photovoltaic installations.

A. **Applicability of other requirements.** Except as provided below, all solar photovoltaic installations shall meet the requirements of this chapter, including those concerning the bulk and height of structures, lot area, open space, parking, signs, surface water runoff, and building coverage requirements.

B. **Additional standards.** The following additional standards shall apply to solar photovoltaic installations during site plan reviews and special permit proceedings:

(a) Clearing. For large solar photovoltaic installations, clearing of natural vegetation shall be limited to that necessary for construction, operation and maintenance. Where steep slopes will be disturbed, suitable erosion control measures shall be taken prior to removal.

(b) Setbacks. Front setback requirements otherwise applicable in each zone shall apply, but side and rear setback requirements in each zone shall be 10 feet.

(c) Lot coverage. For purposes of determining compliance with maximum lot coverage requirements, ground-mounted solar collectors mounted above pervious surfaces are not buildings.

(d) Screening. Within medium and large solar photovoltaic installations, reasonable efforts shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures. At the owner's discretion, a full perimeter fence may be installed for security purposes. Any perimeter fence shall, to the extent practicable, allow for wildlife movement patterns. Buildings and accessory structures should be joined or clustered to minimize adverse visual impacts.

(e) Height. Ground-mounted collectors within solar photovoltaic installations shall not exceed a height of 15 feet.

(f) Lighting. Lighting of medium and large solar photovoltaic installations, including appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting shall be directed downward and shall employ full cutoff fixtures.

(g) Signs. Solar photovoltaic installations shall not include any advertising signs except for one sign, of not more than four square feet, identifying the operator of the installation. Medium and large solar photovoltaic installations shall include a small sign at the perimeter providing a twenty-four-hour emergency contact phone number.

(h) Site access. Site access shall be sufficient for fire prevention and control.

(i) Safety. Roof-mounted solar photovoltaic installations shall not cause the shedding of ice or snow from the roof into a porch, stairwell or pedestrian travel area.

C. **Regulation by Class**

(1) In the various zones, solar photovoltaic installations of the sizes shown in the table are either permitted by right without board review, are permitted after site plan review, require a special permit, or are prohibited, as follows:

(2) Key: BR = By Right, SPR = Site Plan Review, SP = Special Permit, Pro. = Prohibited, EFSB=Massachusetts Energy Facilities Siting Board

	Building-Mounted Canopy (<25kW)	**Small (<25 kW)**	**Medium – Primary Use (25kW – <250 kW)**	**Medium – Accessory Use (25kW – <250kW)**	**Large I (250kW – <1MW)**	**Large II (1MW – <25MW)**	**Large Access-ory Use (250kW – <25MW)**	**Large – III (>=25MW)**
R-20	BR	BR	SPR	SPR	Pro.	Pro.	Pro.	EFSB
R-30	BR	BR	SPR	SPR	Pro.	Pro.	Pro.	EFSB
RA-40	BR	BR	SPR	SPR	SP	Pro.	Pro.	EFSB
CR	BR	BR	SPR	SPR	SP	SP	SP	EFSB
RM	BR	BR	SPR	SPR	SP	Pro.	Pro.	EFSB
RB	BR	BR	BR	BR	SP	SP	SP	EFSB
CBC	BR	BR	BR	BR	SP	SP	SP	EFSB
DCBC	BR	BR	BR	BR	SP	SP	SP	EFSB
PCVC	BR	BR	BR	BR	SPR	SP	SP	EFSB
OPLI	BR	BR	BR	BR	SPR	SP	SP	EFSB
I	BR	BR	BR	BR	SPR	SP	SP	EFSB

(3) Notwithstanding the table, any solar photovoltaic installation on a landfill or brownfield area is prohibited in R-20 and R-30 zones, and allowed in every other zone by a special permit up to 25MW.

(4) Where a special permit is required only under this section, the Planning Board is the special permit granting authority. Under state law, the Energy Facilities Siting Board has sole authority over solar photovoltaic installations of 25 MW or greater.

D. **Abandonment and removal**

(a) Any medium or large solar photovoltaic installation which has reached the end of its useful life or has been abandoned shall be decommissioned by the owner or operator

within six months. A medium or large solar photovoltaic installation shall be deemed to have been discontinued if it has not been in service for a continuous period of 12 months.

(b) As a condition of site plan approval or a special permit, the owner and operator of a medium or large solar photovoltaic installation shall be required to consent that the Town may enter and decommission the installation if and when it has been abandoned for more than nine months, with the costs of decommissioning to be recovered from the owner, the operator, or the land.

(c) Decommissioning shall consist of:

[1] Physical removal of all ground-mounted solar photovoltaic installations, structures, equipment, security barriers and transmission lines from the site. The owner or operator may leave undisturbed existing landscaping and below-grade foundations in order to minimize erosion and disruption to vegetation.

[2] Disposal of all solid and hazardous waste in accordance with law.

[3] Stabilization or revegetation of the site as necessary to minimize erosion.

(d) If the owner or operator fails to remove the installation within six months of abandonment:

[1] The owner or operator shall be in violation of this chapter and subject to fines as provided in Article XIII.

[2] Having obtained a court order to enforce a condition of approval as mentioned above, the Building Commissioner may enter the premises and decommission the installation.

[3] The Town may recover decommissioning costs from the owner, operator, or land.

Sec. 3. § 199-9.9 is repealed.

Sec. 4. A new § 199-9.12.2 is added to read:

§ 199-9.12.2 Wind Energy Facilities

A. **Purpose.** The purpose of this section is to outline the special permitting process for and encourage the responsible development of the Town's wind energy resources. By providing standards for the design, placement, construction, monitoring, modification and removal of wind energy facilities, this section is intended to address public health and safety, minimize impacts on scenic, natural and historic resources of the Town and provide adequate financial assurances for decommissioning.

B. **Definitions.**

FALL ZONE — The additional setback distance required by subdivision E of this section for a wind energy facility or a meteorological tower

HEIGHT — The height from the existing grade of the fixed portion of the tower to the blade tip of the turbine at the highest point of its rotation or the highest point of the wind energy facility.

LARGE WIND ENERGY FACILITY — A wind energy facility with a height equal to or greater than 200 feet.

METEOROLOGICAL TOWER — A tower used for supporting anemometers, wind vanes and other equipment to assess wind resources at a predetermined height above the ground.

SHADOW FLICKER – The pulsating effect of alternating light and shadows cast when rotating wind turbine blades move in front of the sun.

SMALL WIND ENERGY FACILITY — A wind energy facility with a height of less than 200 feet.

WIND ENERGY FACILITY — All equipment, machinery and structures utilized in connection with the conversion of wind to electricity. This includes, but is not limited to, transmission, storage, collection and supply equipment, substations, transformers, towers, wind turbines, foundations, stormwater control measures, access roads and other appurtenant structures, facilities and equipment.

WIND TURBINE — A device that converts kinetic wind energy into rotational energy that drives an electrical generator.

C. **Use regulations.** No wind energy facility shall be erected, constructed, or installed without first obtaining a special permit from the Planning Board. Physical modifications to an existing wind energy facility that materially alter its type, number, location, height or configuration shall also require a special permit from the Planning Board.

D. **General requirements.**

(1) Compliance. The construction, operation, modification and removal of all wind energy facilities shall comply with all local, state and federal laws.

(2) Inspection reports. The operator(s) of a wind energy facility shall submit inspection reports to the Building Commissioner every five years. The inspection report must be completed by a licensed professional structural engineer.

(3) Unsafe structure. Should the inspection of any wind energy facility reveal structural defects or safety concerns that, in the opinion of the licensed professional structural engineer, render the wind energy facility unsafe, the following actions must be taken. At the discretion of the Building Commissioner, the operation of the wind energy facility shall be terminated until the structural defects and/or safety concerns have been addressed. Within 30 business days of notification of an unsafe structure, the operator(s) of the wind energy facility shall submit a plan to remediate the structural or safety defects to the Building Commissioner. Failure to remediate the structural or safety defects within six months from the date of initial notice shall be a violation of the special permit and subject to the penalties and fines as allowed by law.

(4) Liability insurance. The owner of the wind energy facility shall obtain and keep current insurance policy or policies against loss or damage to persons or property, including personal injury or death resulting from the construction, operation and decommissioning of the wind energy facility. The Planning Board shall determine the minimum amount of liability insurance required. The owner of the wind energy facility shall provide the Planning Board with proof of liability insurance, in the amount determined by the Planning Board, prior to the issuance of a building permit and on an annual basis thereafter. The town Land Use Office shall establish a system to ensure that such required insurance policies do not expire. Failure to maintain a valid required

insurance policy shall constitute a violation of this chapter.

(5) Financial surety. The owner(s) of the wind energy facility shall provide the Planning Board with financial surety for the following purpose prior to the issuance of a building permit. The Planning Board may require that a qualified consultant, chosen by the Town and paid for by the applicant, give the estimate of the dollar amount of the surety to be posted. All surety, if filed and deposited, shall be approved as to form and manner of execution by Town Counsel. The town Land Use Department shall establish a system to ensure that such financial surety instruments do not expire. Failure to maintain a current required financial surety shall constitute a violation of this chapter. The required sureties may cover the following risks:

(a) Surety to ensure that the wind energy facility project site is properly stabilized to protect downslope properties and public ways. The amount and form of surety shall be determined by the Planning Board.

(b) Surety to cover possible damage to public ways and public lands damaged during the transportation of the wind energy facility components. The amount and form of surety shall be determined by the Planning Board.

(c) Surety to cover the cost of removal of the wind energy facility and the restoration of the site in the event the Town must remove the wind energy facility and restore the site. The amount and form of surety shall be determined by the Planning Board, but in no event shall the amount exceed 125% of the total estimated cost of removal.

E. **Design standards.**

(1) Height. No wind energy facility shall exceed 420 feet in height.

(2) Meteorological towers. Any meteorological towers constructed for analysis of wind conditions shall be set back at least 1.5 times its height from all public ways and off-site buildings. No meteorological tower shall exceed 420 feet in height.

(3) Appearance. All wind energy facilities shall be finished in a neutral (white or gray), non-reflective color to minimize visual impacts.

(4) Signage. Signs listing the twenty-four-hour contact information of the wind energy facility operator shall be installed in an easily accessible and noticeable location at the wind energy facility site. All signs shall comply with Article VII of this chapter.

(5) Lighting. A wind energy facility shall contain a beacon light or lights as required by the Federal Aviation Administration (FAA). All operational lighting shall be directed downwards and screened from roadways and abutting properties.

(6) Shadow flicker. No wind energy facility shall cause more than 30 shadow flicker hours per year on any off-site inhabited building or undeveloped lot. Nevertheless, the Planning Board may allow more than 30 shadow flicker hours per year on an off-site inhabited building or an undeveloped lot only if written permission is granted by all individuals or entities with control over the affected real property.

(7) Appurtenant structures and equipment. All appurtenant structures, and equipment shall comply with the dimensional requirements of the underlying zoning district, including

setbacks and height.

(8) Noise regulations. All wind energy facilities and appurtenant equipment shall comply with the provisions of the Massachusetts Department of Environmental Protection's Division of Air Quality Noise Regulations (310 CMR 7.10).

(9) Additional Setbacks. No wind energy facility shall be located within the following distances measured from the tower base:

(a) To the nearest off-site inhabited building in existence, three times the height of the wind energy facility.

(b) To the nearest public rights-of-way and recreational trails, 1.5 times the height of the wind energy facility. The Planning Board may reduce this setback requirement if written permission is granted by all individuals or entities with control over the affected real property.

(10) Unauthorized access. The owners or operators of all wind energy facilities shall construct security barriers to prevent unauthorized persons from gaining access to the facility.

(11) Emergency response access. The wind energy facility and access roads shall be constructed and maintained to allow for safe access at all times by local emergency vehicles. Local public safety officials shall be provided access to respond to emergencies.

(12) Stormwater management. All stormwater controls installed at the wind energy facility site and on associated roadways shall be constructed and managed according to the Massachusetts Stormwater Policy.

F. **Application Contents.** The applicant shall submit the following required information as part of the application for a wind energy facility special permit. All site plans shall be signed and sealed by a registered land surveyor in consultation with a licensed professional engineer. The Planning Board may waive particular application requirements in its discretion.

(1) Contact information. Name, address, phone number, email and signature of the applicant, as well as all co-applicants and property owners, if any, and the name, contact information and the signature of any agents representing the applicant.

(2) Site identification. Identify the location of the proposed wind energy facility. Provide the street address, if any, and the tax map and parcel number(s).

(3) Location map. A relevant portion of the most recent USGS Quadrangle or at similar scale, showing the proposed wind energy facility site, associated roadways, transmission lines and the area within at least a five-mile radius of the proposed site.

(4) Site control. The applicant shall demonstrate actual control over and legal access to the proposed site sufficient to allow for the construction and operation of a wind energy facility.

(5) Vicinity map. A map of the proposed wind energy facility site at a scale of one inch equals 300 feet or similar scale, with existing contour intervals no greater than 10 feet, showing the entire area within a one-half-mile radius of the proposed wind energy facility and shall

include existing topography; public and private roads; recreation trails; property lines of all lots; structures, including their use; historic sites; cultural sites; wetlands; known bat hibernacula; known critical habitat areas; other environmentally sensitive areas; and location of existing and proposed electric distribution lines, transformers, substations, and access easements.

(6) Site plan. The applicant shall submit a site plan with a scale of one inch equals 40 feet, unless otherwise noted, with contour intervals no greater than two feet, showing the following:

(a) Property lines of the proposed wind energy facility site and adjacent parcel within two times the height of the wind energy facility.

(b) Outline of all existing structures, including their uses, located within two times the height of the wind energy facility with the exact distances to the base of the nearest turbine listed.

(c) Existing and proposed public and private roads, driveways, and recreational trails within two times the height of the wind energy facility.

(d) Representations, dimensioned and to scale, of the proposed wind energy facility, including, but not limited to, tower foundations, guy anchors, cable locations, associated equipment and structures, fencing, electric distribution infrastructure, parking and access roads.

(e) All proposed changes to the existing site, associated roadways and transmission lines, including areas of temporary clearing, areas of permanent clearing, areas of grading, and areas of cut and fill.

(f) Delineation of all wetland resource areas and buffers on the proposed wind energy facility site, associated roadways, and transmission lines.

(g) Location of known habitat areas for rare species, endangered species and species of special concern.

(h) A cross section of the proposed access road, indicating its width, crown, depth of gravel, drainage, and paving or other surface material.

(7) Elevations. Siting elevations or views at grade from north, south, west and east for a distance equal to 1.5 times the height of the wind energy facility. Elevations shall be at 1/4-inch equals one foot or similar scale and showing the following:

(a) The proposed wind energy facility, associated equipment, existing and proposed structures, and security barriers with total elevation dimensions.

(b) Existing and proposed trees and shrubs at the time of application, with approximate elevations dimensioned.

(8) Technical information.

(a) Documentation of the wind energy facility's stated nameplate capacity, manufacturer, model number, tower height, rotor diameter, braking mechanisms, other safety mechanisms, tower type, color, foundation type and foundation dimensions.

(b) A one-line or three-line electrical diagram detailing the wind energy facility, associated components and electrical interconnection methods with all National Electrical Code compliant disconnects and overcurrent devices.

(9) Utility notification. The applicant for an interconnected facility shall demonstrate that the utility company that controls the local electric grid has been informed of the applicant's intent to install an interconnected wind energy facility.

(10) Stormwater control plans. Engineering plans showing the drainage of surface water and detailed plans to control erosion and sedimentation, during construction and operation, in conformance to the Massachusetts Stormwater Policy.

(11) Transportation plans. A written transportation plan discussing the anticipated transportation issues created by the transportation of the wind energy facility components, which shall include the following:

(a) A map showing the anticipated transportation route commencing at the Massachusetts state line.

(b) All locations in the Town where land alterations and clearing of vegetation will occur, regardless of ownership, including the approximate square footage of each land alteration and clearing.

(c) A detailed list of all bridges and culverts to be crossed in the Town during the transportation of the wind energy facility components, and describing the applicable width and weight restrictions of each bridge and culvert.

(d) Detailed site plans for all anticipated roads, bridges, or culvert alterations in the Town along the anticipated transportation route, regardless of ownership.

(e) A list of the anticipated combined weight of the delivery vehicles and cargo.

(f) A list of the turning radii of the delivery vehicles with cargo.

(g) All anticipated road closures and traffic disruptions, including those that may affect emergency response vehicles, and plans to manage, in cooperation with local and state officials, these road closures and traffic disruptions.

(12) Operation and maintenance. The applicant shall submit an operation and maintenance plan for the anticipated life expectancy of the wind energy facility, showing how the operator(s) will inspect and maintain the wind energy facility in good condition.

(13) Removal plan. The applicant shall submit a plan for the removal of the wind energy facility and restoration of the site to its preexisting condition upon abandonment or decommissioning. The removal plan shall be certified by a licensed professional engineer and include a detailed estimate of the anticipated removal and site restoration costs that includes a mechanism to account for inflation.

H. **Large Wind Energy Facility Site Assessments.** In addition to the requirements otherwise applicable under the preceding subsection to all wind energy facilities, the following shall apply to large wind energy facilities.

(1) Balloon test. After the application is submitted, the applicant shall arrange to fly a brightly colored, four-foot-diameter balloon at the site of the proposed wind energy

facility at the maximum height of the wind energy facility. A balloon shall be flown for each proposed wind turbine, and each balloon shall contain a beacon light similar in color and output to the beacon light to be required by the FAA, if any. The balloons shall be flown at a date and time, and for a duration, to be determined by the Planning Board. If visibility and weather conditions are inadequate for observers, the Planning Board may require additional tests.

(2) Sight-line simulations. The Planning Board shall identify up to five locations from which the applicant shall prepare and submit sight line simulations from the chosen locations to the proposed wind energy facility site. All simulations shall be prepared by the applicant in color and provide an accurate representation of the height, width and breadth of the proposed wind energy facility.

(3) Noise analysis. The applicant shall submit the results of a noise analysis to the Planning Board. The noise analysis shall be conducted in accordance with industry standards and certified by a qualified independent acoustical engineer. The analysis shall contain sufficient information for the Planning Board to determine whether the operation of the proposed wind energy facility will comply with Massachusetts Department of Environmental Protection's Division of Air Quality Noise Regulations (310 CMR 7.10). In completing the noise analysis, the acoustical engineer shall consider the unique topography of the surrounding area, both daytime and nighttime ambient noise levels, seasonal conditions, nearby residences, prevailing wind direction and atmospheric conditions, such as high wind shear or thermal inversion that may affect the propagation of sound emitted from the wind energy facility. The noise analysis shall also analyze and discuss the anticipated impacts of low frequency noise emitted from the wind energy facility.

(4) Shadow flicker analysis. The applicant shall conduct a shadow flicker analysis and submit its findings to the Planning Board. The analysis shall include a detailed discussion of the anticipated shadow flicker impacts for all off-site inhabited buildings and undeveloped lots estimated to receive 30 or more shadow flicker hours per year, worst-case scenario. The applicant may incorporate sunshine probabilities and meteorological data.

(5) Avian and bat species analysis. The applicant shall submit the results of an avian and bat species analysis to the Planning Board. The avian and bat species analysis shall be conducted and certified by a qualified independent wildlife biologist. The avian and bat species analysis shall contain sufficient information to fully characterize and determine the risk posed by the proposed wind energy facility to avian and bat species. Applicants shall comply with the most recent U.S. Fish and Wildlife Service Wind Turbine Guidelines Advisory Committee Recommended Guidelines: Recommendations on Developing Effective Measures to Mitigate Impacts to Wildlife and Their Habitats Related to Land-Based Wind Energy Facilities, when planning and conducting studies to meet the requirements of this section. For one year following the onset of the wind facility operation, the operator shall conduct monitoring of bat and avian species injuries and mortality. The monitoring will be conducted by a professional approved by the Planning Board and reported to the Board at the end of the first year of operation.

I. **Planning Board Procedures**. Upon receipt of a complete application for a wind energy

facility, the Planning Board shall review and take action upon the application in accordance with the special permit procedures set forth in § 199-13.4 and this section.

(1) Consultant review. Upon submission of an application for a wind energy facility special permit, the Planning Board may hire independent consultants at the applicant's expense, pursuant to MGL c. 44, § 53G, to assist the Planning Board with its review of the application.

(2) Reasonable conditions and mitigation. The Planning Board may impose reasonable conditions, safeguards and limitations on time of use of the facility and may require the applicant to implement all reasonable measures to mitigate unforeseen adverse impacts of the wind energy facility should they occur.

J. **Damage to Public Ways and Public Lands.** The applicant shall be responsible for the cost of repairing any damage to public and/or private ways and public and/or private lands in the Town in connection with the transportation, construction, operation, maintenance and decommissioning of the wind energy facility.

(1) In furtherance of this section, an independent licensed professional engineer, paid for by the applicant and selected by the Town, shall document the condition of all public and/ or private ways and public and/or private lands along the anticipated transportation route prior to the transportation of any wind energy facility.

(2) Within 30 days after all wind energy facilities components have been transported, the independent licensed professional engineer, paid for by the applicant and selected by the Town, shall redocument the condition of all public and/or private ways and public and/or private lands along the actual transportation route to determine whether the public and/or private ways and public and/or private lands have been damaged by the applicant and, if so, the total cost to repair such damage. The applicant is responsible for the total cost of all repairs even if this exceeds the amount of the surety held by the Town.

K. **Abandonment and Removal.**

(1) The most recent wind energy facility owner(s) shall remove the wind energy facility, at the end of its useful life, or when it is abandoned, and restore the site in accordance with facility's previously submitted removal plan. The most recent operator shall notify the Building Commissioner by certified mail of the proposed date of discontinuance. Without notice of a proposed date of discontinuance, the wind energy facility shall be presumed abandoned if it is not operated for a period of six months.

(2) After six months of nonoperation, the Building Commissioner shall issue a written notice of abandonment to the most recent owner(s). The most recent operator or current owner(s) shall have 30 days to rebut the presumption of abandonment by submitting information to the Building Commissioner that demonstrates that wind energy facility has operated within the six-month period or the wind energy facility will return to operation at a date specified, not to exceed one year. If the most recent operator or owner(s) does not submit any information to the Building Commissioner or the wind energy facility has not been returned to operation within one year of the date of the written notice of abandonment, it shall be deemed abandoned.

(3) The most recent owner(s) shall physically remove the wind energy facility and restore

the site within 180 days from the date of discontinuance or abandonment. If the most recent owner(s) fails to remove the wind energy facility within the 180-day period, the Town shall have the right to enter onto the site and physically remove the wind energy facility and restore the site at the sole expense of the most recent owner(s).

L. **Lapse of Approval.** Any special permit approved to construct, operate or modify a wind energy facility pursuant to this section shall automatically expire if:

(1) The wind energy facility has not been installed and operating within four years from the date of approval; or

(2) The wind energy facility becomes abandoned or discontinued.

M. **Severability**. The provisions of this section are severable, and the invalidity of any part shall not affect the validity or effectiveness of the remainder.

Sec. 5. A new § 199-9.12.3 is added to read:

§ 199-9.12.3 Battery Energy Storage Systems (BESS)

A. Purpose

This section establishes standards for the siting, design, construction, installation, operation, modification, maintenance, abandonment, and removal of Battery Energy Storage Systems (BESS). This section is intended to facilitate appropriate energy storage infrastructure while protecting the public health, safety, and welfare; minimizing potential impacts to neighboring properties and land uses; protecting natural, scenic, agricultural, historic, and cultural resources; maintaining the character of the Town; providing appropriate emergency-response information; and ensuring that abandoned or decommissioned facilities are properly removed.

B. Applicability

(1) This section shall apply to all new BESS installations and to material modifications to existing BESS installations proposed after September 30, 2026.

(2) BESS installations that are subject to the consolidated local permitting process under state law are not exempt from the requirements of this section.

C. Definitions

The following terms are defined. Other definitions contained in Article XIV shall also apply unless they conflict.

(1) **Accessory BESS.** A BESS that is secondary and incidental to a lawful principal use on the same lot. An Accessory BESS shall not be considered a principal use unless specifically permitted as a principal use under this section.

(2) **Aggregate Energy Capacity.** The total amount of energy that can be stored in all batteries comprising a BESS, expressed in kilowatt-hours (kWh) or megawatt-hours (MWh).

(3) **As-of-Right.** Development that may proceed without a Special Permit, variance, zoning amendment, waiver, or other discretionary zoning approval. A use permitted as-of-right may nevertheless be subject to Site Plan Review.

(4) **Battery Energy Storage System (BESS).** A system consisting of one or more battery

modules for storing electrical energy, together with equipment necessary for the safe and proper operation of the system and physical containers or structures providing secondary containment. BESS may be a principal or accessory use and may be associated with solar photovoltaic installations, electrical substations, power generation facilities, or other lawful uses.

(5) **Building-Integrated BESS.** A BESS incorporated into or contained within a building and serving that building or an on-site associated lawful use.

(6) **Co-Located BESS.** A BESS located on the same lot as, and directly associated with, a solar photovoltaic installation, electrical substation, power generation facility, or similar energy infrastructure.

(7) **Decommissioning.** The process of removing a BESS and associated equipment, structures, foundations, electrical equipment, fencing, roads, and other site improvements and restoring the site.

(8) **Material Modification.** An increase in Aggregate Energy Capacity, an increase in Site Footprint, a significant change in system configuration, or a change in technology or equipment that materially changes the project's fire-safety, environmental, visual, noise, or operational characteristics. Ordinary maintenance and repair that does not materially alter the capacity, configuration, or operating characteristics is excluded.

(9) **Site Footprint.** The total area occupied by all BESS equipment and associated structures, including battery containers, inverters, transformers, control equipment, fire-protection equipment, fencing, and other directly related facilities.

D. BESS Installation Classifications

(1) BESS installations are classified according to Aggregate Energy Capacity as follows:

Tier	Aggregate Energy Capacity
1	Less than 250 kWh
2	250 kWh to less than 10 MWh
3	10 MWh to less than 100 MWh

(2) In accordance with state law, systems of more than 100 MWh are regulated by the Massachusetts Energy Facilities Siting Board.

(3) Multiple BESS installations shall not be intentionally divided, separated, or phased for the purpose of avoiding the applicable tier or permitting requirements.

E. Building-Integrated and Accessory BESS

(1) Building-integrated BESS shall be subject to all applicable building, electrical, fire, zoning, and environmental requirements.

(2) A BESS associated with a lawful solar photovoltaic installation may be treated as an Accessory BESS where it is secondary and incidental to the solar installation.

F. BESS Zoning Regulation

(1) BESS uses shall be subject to review and approval in accordance with the following tables.

Except as specifically modified by this section, all BESS installations shall comply with the applicable dimensional, parking, landscaping, access, environmental, stormwater, floodplain, signage, lighting, and other requirements of this chapter.

(2) Key

BR = Allowed by right, subject to applicable building, electrical, fire, and other permits.
SPR = Allowed by right, subject to Site Plan Review by the Planning Board. Site Plan Review shall regulate the project for compliance with applicable standards but shall not constitute discretionary authority to deny a use that is otherwise permitted as-of-right.
SP = Special permit required.

(3) Review Status

Lee Zoning District	**Tier 1 Principal**	**Tier 1 Accessory**	**Tier 2 Principal**	**Tier 2 Accessory**	**Tier 3 Principal**	**Tier 3 Accessory**
R-20 Residential	BR	BR	SP	SPR	SP	SP
R-30 Residential	BR	BR	SP	SPR	SP	SP
RM Residential-Multiple Dwelling	BR	BR	SP	SPR	SP	SP
RA-40 Residential-Agricultural	BR	BR	SPR	SPR	SP	SPR
CR Conservation-Residential	BR	BR	SP	SPR	SP	SP
RB Rural Business	BR	BR	SPR	SPR	SP	SP
CBC Commercial Business Corridor	BR	BR	SPR	SPR	SP	SP
DCBC Downtown Commercial Business Corridor	BR	BR	SPR	SPR	SP	SP
PCVC Planned Commercial Village Center	BR	BR	SPR	SPR	SP	SPR
I Industrial	BR	BR	BR	BR	SPR	SPR

Lee Zoning District	Tier 1 Principal	Tier 1 Accessory	Tier 2 Principal	Tier 2 Accessory	Tier 3 Principal	Tier 3 Accessory
OPLI Office Park/ Light Industrial	BR	BR	BR	BR	SPR	SPR

(4) BESS accessory to a solar photovoltaic installation, electrical substation, power-generation facility, or similar lawful energy infrastructure shall be permitted in the same zoning districts and according to the same review requirements in which the associated principal use is lawfully permitted.

(5) Where a BESS is co-located with a solar photovoltaic installation, the BESS shall also comply with § 199-9.12.1 of this bylaw.

(6) A BESS installation shall not be deemed to establish a new principal use for purposes of determining compliance with dimensional or parking requirements where the BESS qualifies as an accessory use.

(7) Any material modification to an existing BESS shall be reviewed under this section. An increase in Aggregate Energy Capacity that causes the system to move from one tier to a higher tier shall require compliance with the requirements applicable to the new tier. Material modifications shall not be divided into separate applications for the purpose of avoiding the applicable permitting requirements.

G. BESS Design and Operation Standards

(1) **Other Codes**

(a) BESS equipment shall be listed or certified by a Nationally Recognized Testing Laboratory where such listing or certification is required by applicable code or regulation.

(b) BESS installations shall comply with applicable federal, state, and local requirements, including the Massachusetts Electrical Code, Massachusetts Fire Code, Massachusetts Building Code, applicable NFPA standards, and applicable UL standards.

(c) BESS installations shall comply with the Massachusetts Comprehensive Fire Safety Code and applicable provisions of NFPA 855 and other applicable fire-safety standards. The Lee Fire Chief may require reasonable additional project-specific measures necessary to protect public health and safety-which do not conflict with requirements established by the State Fire Safety Code or other applicable state regulations.

(d) BESS installations shall be designed, installed, operated, and maintained in accordance with the manufacturer's specifications and all applicable safety standards.

(e) Utility interconnections shall comply with the requirements of the serving utility and applicable state and federal requirements. Underground utility connections may be required where reasonably necessary because of site-specific conditions, visual impacts, environmental resources, or public safety. Electrical transformers and similar utility equipment may be installed above ground where consistent with applicable standards and the requirements of the serving utility.

(2) **Setbacks.** BESS equipment shall comply with the minimum setbacks of the underlying zoning district, unless a greater setback is required by the State Fire Code, NFPA 855, or

another applicable code or regulation.

(3) **Emergency Access.** Adequate emergency access shall be provided to all BESS installations requiring Site Plan Review. Access roads and driveways shall be designed to accommodate emergency vehicles and shall be maintained year-round. Emergency access shall remain unobstructed at all times. The Lee Fire Chief may identify additional access requirements reasonably necessary to permit effective emergency response.

(4) **Environmental Protection.** BESS shall be designed to prevent the release of hazardous materials to soil, surface water, groundwater, wetlands, or other environmental resources. Where applicable, the applicant shall provide secondary containment, spill-control measures, drainage controls, and other measures necessary to prevent contamination. Nothing in this section shall exempt a BESS from the Massachusetts Wetlands Protection Act, 310 CMR 10.00, stormwater requirements, floodplain requirements, or any other applicable environmental regulation. Where a project is located within or near a resource area subject to the jurisdiction of the Lee Conservation Commission, the applicant shall obtain all required approvals before commencing work.

(5) **Stormwater.** BESS installations shall comply with applicable Massachusetts Stormwater Management Standards and all applicable Town stormwater requirements. The applicant shall demonstrate that the project will not cause unreasonable increases in stormwater runoff, erosion, sedimentation, flooding, or adverse impacts to neighboring properties. Site design shall minimize new impervious surfaces to the maximum extent practicable. Existing drainage patterns shall be maintained to the maximum extent practicable.

(6) **Floodplain.** BESS installations proposed within the Floodplain District or other mapped flood hazard area shall comply with all applicable provisions of § 199-3.2 and other applicable provisions of this bylaw. Critical electrical and battery equipment shall be located, elevated, protected, or otherwise designed consistent with applicable federal, state, and local floodplain requirements. No BESS installation shall be permitted where it is prohibited by applicable floodplain regulations.

(7) **Lighting.** Lighting shall be limited to that reasonably necessary for safety, security, maintenance, and operation. Lighting shall be directed downward and shielded to minimize glare, light trespass, and impacts to neighboring properties. Continuous illumination of the BESS facility shall not be permitted unless specifically required for safety or operational purposes.

(8) **Signage.** Signage shall be l required for identification, emergency response, safety, warning, access control, and legally required information. Signs shall not be illuminated in a manner that creates glare or a nuisance to neighboring properties.

(9) **Noise.** BESS installations shall comply with all applicable Massachusetts and town noise requirements. Equipment shall be selected and located to minimize noise impacts to surrounding properties. Where noise-generating equipment is located near residential uses, the Planning Board may require a noise study as part of Site Plan Review where reasonably necessary to determine compliance.

(10) **Screening and Landscaping.** BESS installations visible from public ways or neighboring residential properties shall be screened to the maximum extent practicable. Screening may consist of existing vegetation, new native plantings, fencing, walls, berms, or a combination thereof. Existing mature vegetation shall be retained where practicable. Screening shall not interfere with emergency access, ventilation, fire safety, utility access, or required clearances.

(11) **Fencing and Security.** Outdoor BESS installations shall be secured against unauthorized access. Security fencing shall be designed to maintain emergency access and visibility while minimizing visual impacts. Any perimeter fence shall, to the extent practicable, allow for wildlife movement patterns. The Planning Board may require fencing to be visually softened through landscaping where appropriate.

(12) **Agricultural Land.** Where a BESS is proposed in the RA District or on land actively used for agriculture, the applicant shall minimize impacts to agricultural land to the maximum extent practicable. The Planning Board may require appropriate site design measures to preserve agricultural access and minimize soil disturbance. Where a BESS is located on agricultural land subject to state agricultural protection requirements, those requirements shall also apply.

(13) **Natural Resources.** BESS installations shall be designed to avoid and minimize impacts to natural resources to the maximum extent practicable. Where the project is subject to the jurisdiction of the Massachusetts Wetlands Protection Act and any local wetlands bylaws for the Town, as well as the Scenic Mountain Act, the applicant shall obtain all required approvals from the Lee Conservation Commission.

(14) **Construction Requirements.** Construction activities shall comply with applicable erosion and sedimentation controls, stormwater requirements, construction hours, road access requirements, noise and dust limits, and other applicable Town regulations. Construction materials and equipment shall be stored in a manner that does not create a public safety or environmental hazard. The applicant shall coordinate construction access with the appropriate Town departments.

H. Current Ownership and Contact Information

(1) The owner or operator of a Tier 2 or Tier 3 BESS shall ensure that:

(a) The Town Police Department always has current contact information for the BESS facility.

(b) The Lee Fire Department and other appropriate emergency-response personnel always have emergency contact information.

(2) The owner or operator shall notify the Town Police Department and Lee Fire Department within fifteen days of a change in ownership. The notification shall include the new owner's name, business address, telephone number, email address, and emergency contact information.

I. Emergency Response Plan. For all Tier 2 and Tier 3 BESS installations, the applicant shall submit an emergency response plan acceptable to the Lee Fire Department prior to commencement of construction. The emergency response plan shall identify:

(1) The location and configuration of all battery equipment;

(2) Battery chemistry and technology;

(3) Electrical disconnects and emergency shutdown procedures;

(4) Fire detection, suppression, and monitoring systems;

(5) Potential hazardous materials and combustion products;

(6) Emergency contact information;

(7) Procedures for thermal runaway, fire, explosion, electrical failure, flooding, and other

foreseeable emergencies;

(8) Emergency access routes;

(9) Procedures for coordination with the Lee Fire Department and other emergency responders; and

(10) Procedures for notification of nearby property owners where required by the Fire Department.

(11) The Emergency Response Plan shall be updated whenever there is a material change to the system or emergency response procedures.

J. Site Plan Review

(1) Site Plan Review shall determine whether the proposed installation conforms to this section and the applicable provisions of the Lee Zoning Bylaw. The Planning Board shall apply objective and reasonable standards concerning site design, access, landscaping, screening, lighting, drainage, environmental protection, and public safety. Site Plan Review shall not be used to prohibit a BESS use that is not required to obtain a special permit.

(2) Applications for Site Plan Review shall include matters required under § 199-13.3 and, as applicable:

(a) A site plan showing property boundaries, zoning districts, existing structures, proposed BESS equipment, setbacks, access, parking, utilities, drainage, wetlands, water resources, floodplain areas, and existing vegetation;

(b) A detailed equipment layout;

(c) Manufacturer specifications;

(d) Battery chemistry and Aggregate Energy Capacity;

(e) Electrical and single-line diagrams;

(f) Fire-protection information;

(g) Emergency Response Plan;

(h) Noise information where applicable;

(i) Lighting plan;

(j) Landscape and screening plan;

(k) Stormwater management information;

(l) Utility interconnection information;

(m) Decommissioning Plan;

(n) Financial Assurance documentation where required;

(o) Evidence of compliance with applicable building, fire, electrical, and environmental requirements; and

(p) Any other information the planning board reasonably finds necessary to determine compliance with this section.

(3) The applicant shall demonstrate compliance with applicable standards governing battery

safety, fire protection, thermal runaway, electrical safety, emergency shutdown, ventilation, explosion control, and fire detection and suppression.

(4) Where a BESS is proposed in the RA District or on land actively used for agriculture, the applicant shall demonstrate consideration of alternative locations on the property that would avoid or minimize impacts to actively farmed soils.

K. Site Plan Review Criteria

(1) In reviewing a BESS installation, the Planning Board may consider:

(a) Compatibility with surrounding land uses;

(b) Protection of residential neighborhoods;

(c) Protection of wetlands, water resources, floodplains, agricultural resources, scenic resources, and other sensitive areas;

(d) Adequacy of emergency access;

(e) Visual impacts;

(f) Noise;

(g) Lighting;

(h) Stormwater and erosion control;

(i) Existing vegetation and proposed screening;

(j) Traffic and construction access;

(k) Location and configuration of utility infrastructure;

(l) Compliance with applicable state and local safety requirements; and

(m) Adequacy of decommissioning and financial assurance.

(2) For Tier 2 and Tier 3 BESS, the Planning Board may require increased setbacks where reasonably necessary to protect adjacent residential uses, public ways, wetlands, water resources, or other sensitive resources.

L. Abandonment and Decommissioning

(1) A Tier 2 or Tier 3 BESS that has reached the end of its useful life or has been abandoned shall be removed in accordance with this section. The owner or operator shall physically remove the BESS installation and associated structures, equipment, fencing, electrical components, and other associated facilities no later than 150 days after the date of discontinued operations or the date the installation is deemed abandoned, unless an alternative schedule is approved by the Planning Board for good cause.

(2) Decommissioning shall include:

(a) Removal of battery equipment and associated structures;

(b) Removal and lawful disposal of solid and hazardous materials;

(c) Removal of electrical and utility equipment no longer required;

(d) Removal of fencing and security infrastructure unless otherwise approved;

(e) Removal or stabilization of foundations and other site improvements ~~as required~~;

(f) Restoration and/or remediation of disturbed areas;

(g) Stabilization and revegetation necessary to prevent erosion; and

(h) Compliance with all applicable federal, state, and local waste-disposal requirements.

M. Abandonment

(1) A BESS shall be considered abandoned if it has ceased operating for twelve consecutive months, unless the owner demonstrates that the cessation is the result of maintenance, repair, reconstruction, casualty, utility interruption, force majeure, or another circumstance demonstrating an intent and ability to resume operation.

(2) The Planning Board may provide written notice of abandonment and require the owner to submit a schedule for removal.

N. Financial Assurance

(1) For Tier 2 and Tier 3 BESS installations, the applicant shall provide financial assurance sufficient to ensure completion of required decommissioning. The amount of financial assurance shall be based on a reasonable estimate of the cost of removing the BESS and restoring the site.

(2) Financial assurance may consist of a surety bond, irrevocable letter of credit, escrow account, or another legally enforceable financial instrument acceptable to the ~~Town~~ Planning Board. The financial assurance shall remain in effect for the duration of the BESS operation and until the Town determines that all required decommissioning has been completed. The town Land Use Department shall establish a system to ensure that such financial surety instruments do not expire. Failure to maintain a current required financial surety shall constitute a violation of this chapter.

(3) The Planning Board may review existing financial assurances periodically and adjust the amounts to account for changes in decommissioning costs.

O. Administration and Enforcement

(1) The Building Commissioner shall administer building-permit requirements applicable to BESS.

(2) The Planning Board shall serve as the Site Plan Review Authority for BESS installations requiring Site Plan Review.

(3) The Planning Board shall serve as Special Permit Granting Authority for BESS installations.

(4) The Conservation Commission shall retain all jurisdiction granted to it under the Massachusetts Wetlands Protection Act, Scenic Mountain Act, and other applicable laws and bylaws.

P. Construction and Conflicts

(1) If any provision of this section is determined by a court to be invalid, the remaining provisions shall not be affected thereby.

(2) This section shall be interpreted consistently with applicable provisions of Massachusetts General Laws, including M.G.L. c. 40A, M.G.L. c. 131, § 40, applicable provisions of the Massachusetts Building Code and Fire Code, 225 CMR 29.00, and applicable regulations and guidelines of the Massachusetts Department of Energy Resources, Massachusetts

Department of Environmental Protection, Massachusetts Department of Fire Services, and Energy Facilities Siting Board.

(3) Where a requirement of state or federal law is more stringent than a requirement of this section, the more stringent applicable requirement shall control.

(4) Where a conflict exists between this section and another provision of the Lee Zoning Bylaw, the more specific BESS provision shall control.

(5) The Town shall not prohibit a BESS use where state law requires that the use be allowed or reasonably regulated.

Sec. 6. Effective Date

The preceding amendments shall become effective on October 1, 2026.