§220-47.1 Battery energy storage systems (draft v. Sept 16, 2026)

A. Statement of purpose, applicability, and definitions

(1) Purposes of this section. This zoning for battery energy storage systems is adopted to advance and protect the public health, safety, welfare, and quality of life of the Town of Gardiner by creating regulations for the installation and use of battery energy storage systems, with the following objectives:

(a) Providing a regulatory scheme for the designation of properties suitable for the location, construction and operation of battery energy storage systems;

(b) Ensuring compatible land uses in the vicinity of the areas affected by battery energy storage systems;

(c) Mitigating the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources, as described in the Town of Gardiner Natural Resources Inventory; and

(d) creating synergy between battery energy storage system development and the goal of adapting to a changing climate while ensuring open space protection and a balance of economic, environmental, and community sustainability.

(2) Applicability.

(a) The requirements of this section shall apply to all battery energy storage systems and equipment installations permitted, installed, or modified in the Town of Gardiner after the effective date of this section, excluding general maintenance and repair.

(b) Battery energy storage system installations for which a valid building permit has been issued and for which installation has commenced before the effective date of this section shall not be required to meet the requirements of this section.

(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.

(d) All battery energy storage systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in applicable residential, building, electrical, and fire codes, and the Town Code.

(3) Definitions. As used in this section, 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 section, 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. For detailed requirements, see the Fire Code (§1207.3.4 at the time of writing, and as hereafter amended from time to time).

BATTERY 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. An investor-owned battery energy storage system is not considered a Public Utility Facility, as described in §220-74 of the Town of Gardiner Code. The Town of Gardiner classifies battery energy storage systems as Tier 1, Tier 2, Tier 3, or Tier 4 Battery Energy Storage Systems as follows:

(A) Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 80 kWh and, if in a room or enclosed area, consist of only a single energy storage system technology. These systems are accessory uses to a principal use on a property, and are associated with a non-dedicated-use building.

(B) Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 80 kWh and less than or equal to 600 kWh and, if in a room or enclosed area, consist of only a single energy storage system technology. These systems are accessory uses to a principal use on a property, and are typically associated with a non-dedicated-use building.

(C) Tier 3 Battery Energy Storage Systems have an aggregate energy capacity greater than 600 kWh and less than or equal to 8 MWh (8,000 kWh) or are comprised of more than one storage battery technology less than or equal to 600 kWh in a room or enclosed area. These systems are principal structures or uses on a property, and are typically associated with a dedicated-use building.

(D) Tier 4 Battery Energy Storage Systems have an aggregate energy capacity greater than 8 MWh (8,000 kWh). These systems are principal structures or uses on a property, and are typically associated with a dedicated-use building. Tier 4 Battery Energy Storage Systems are not permitted in the Town of Gardiner.

BATTERY ENERGY STORAGE SYSTEM OVERLAY DISTRICT (BSO)

The overlay district in which Tier 3 Battery Energy Storage Systems may be permitted upon fulfillment of all the criteria laid out in §220-47.1E. The BSO district comprises all regions within 500 horizontal feet of a 3-phase electrical transmission line or a high-voltage transmission line, but not in the SP-1, SP-2, SP-3, or HR districts.

BATTERY ENERGY STORAGE SYSTEM PERMIT

The permit for installation and operation of a battery energy storage system, as issued by the Town of Gardiner Building Department.

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.

dBA

"A-weighted decibels," a measurement of noise in decibels, with frequency weighting that approximates the hearing response of the human ear. The common

standards for frequency weighting are described by the International Organization for Standardization, ISO 226:2023.

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 International Building Code, and complies with the criteria that are listed in detail in the Fire Code (currently §1207.7.1, and as hereafter amended from time to time).

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.

KILOWATT-HOURS (kWh)

A measure of total energy storage capacity, corresponding to 1 kW of power supplied for a period of 1 hour.

MEGAWATT-HOURS (MWh)

A measure of total energy storage capacity, corresponding to 1 MW of power supplied for a period of 1 hour. 1 MWh = 1,000 kWh.

NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL)

A 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.

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.

B. General requirements.

(1) A building permit and an electrical permit shall be required for installation of all battery energy storage systems.

(2) Issuance of permits and approvals by the Town of Gardiner Planning Board and the Town of Gardiner Building Department shall include review pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617 ("SEQRA")].

(3) 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) are 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 Town of Gardiner Code. General installation requirements given in Fire Code §1207.4 (part of the Uniform Code) are adopted herein as requirements for all battery energy storage system installations in the Town of Gardiner.

(4) No battery energy storage systems with aggregate energy capacities greater than 8 MWh (8,000 kWh) shall be permitted in the Town of Gardiner.

C. Permitting requirements for Tier 1 Battery Energy Storage Systems. Tier 1 Battery Energy Storage Systems shall be permitted in all zoning districts, subject to the Uniform Code and the "Battery Energy Storage System Permit," and exempt from site plan review.

D. Permitting requirements for Tier 2 Battery Energy Storage Systems

(1) Tier 2 Battery Energy Storage Systems shall be permitted in zoning districts SP-1, HM, RA, CLI, HC, PDD, SMF, RDF, MHF, and CF subject to the Uniform Code and the "Battery Energy Storage System Permit," and exempt from site plan review.

(2) Tier 2 Battery Energy Storage Systems shall not be permitted in zoning districts SP-2, SP-3, HR, HEO, FPO, and SPO.

E. Permitting requirements for Tier 3 Battery Energy Storage Systems

(1) Tier 3 Battery Energy Storage Systems are permitted through the issuance of a special use permit within the CLI, HC, PDD, and BSO zoning districts. The special use permits for Tier 3 Battery Energy Storage Systems will be issued as Battery Energy Storage System Permits. Tier 3 Battery Energy Storage Systems shall be subject to the Uniform Code and the site plan application requirements set forth in this section.

(2) Applications for the installation of Tier 3 Battery Energy Storage Systems shall be:

(a) reviewed by the Code Enforcement Officer for completeness prior to Planning Board review. An application shall be complete when it addresses all matters listed in this Local Law including, but not necessarily limited to, (i) compliance with all applicable provisions of the Uniform Code and all applicable provisions of the Energy Code and (ii) matters relating to the proposed battery energy storage system and Floodplain, Utility Lines and Electrical Circuitry, Signage, Lighting, Vegetation and Tree-cutting, Noise, Decommissioning, Site Plan and Development, Special Use and Development, Ownership Changes, Safety, and Permit Time Frame and Abandonment. Applicants shall be advised within 30 business days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.

(b) subject to a public hearing to hear all comments for and against the application. The Planning Board of the Town of Gardiner shall have a notice printed in a newspaper of general circulation in the Town of Gardiner at least 5 business days in advance of such hearing. Applicants shall have delivered the notice by first class mail to adjoining landowners or

landowners within 1,000 feet of the property at least 15 days prior to such a hearing. Proof of mailing shall be provided to the Planning Board at the public hearing.

(c) referred to the Ulster County Planning Department pursuant to General Municipal Law § 239-m.

(d) upon closing of the public hearing, the Planning Board shall take action on the application within 62 days of the public hearing, which can include approval, approval with conditions or amendments, or denial. The 62-day period may be extended upon agreement by both the Planning Board and the Applicant.

(3) Utility lines and electrical circuitry. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment that is required, including infrastructure such as poles accompanied by new easements and right-of-way.

(4) Signage.

(a) The signage shall be in compliance with ANSI Z535 and the Fire Code (currently §1207.4.8, or as hereafter amended from time to time). At a minimum, it 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 phone number.

(b) 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.

(5) 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. At a minimum, lighting shall be compliant with §220-40L of the Town of Gardiner Code.

(6) Vegetation and tree-cutting. Areas within 10 feet on each side of a Tier 3 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.

(7) Noise. The 1-hour average noise generated from Tier 3 Battery Energy Storage Systems, components, and associated ancillary equipment shall not exceed a noise level of 55 dBA as measured at the boundary of the participating property that contains the battery energy storage system. Applicants may submit equipment and component manufacturers noise ratings together with modeling results to demonstrate compliance. Following initial installation, the applicant may be required to provide Operating Sound Pressure Level measurements from a reasonable number of sampled locations at the perimeter of the participating property to demonstrate compliance with this standard at the boundaries with non-participating properties, prior to permit issuance.

(8) Decommissioning.

(a) Decommissioning plan. The applicant shall submit a decommissioning plan, developed in accordance with the Uniform Code, to be implemented upon abandonment and/or in conjunction with removal from the facility. The decommissioning plan shall include:

[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, and transmission lines from the site;

[2] Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations, including recycling of materials to the maximum extent practicable;

[3] The anticipated life of the battery energy storage system;

[4] The estimated decommissioning costs 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; and

[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.

(b) Decommissioning Fund. The owner and/or operator of the energy storage system, shall continuously maintain a fund or bond payable to the Town of Gardiner, in a form approved by the Town of Gardiner, for the removal of the battery energy storage system, in an amount to be determined by the Town of Gardiner, for the period of the life of the facility. All costs of the financial security shall be borne by the applicant. The amount of the bond shall be re-evaluated by the Town of Gardiner every two (2) years in order to account for inflation or other potential increases in the cost of decommissioning; in the absence of re-evaluation by the Town of Gardiner, the amount of the bond shall be increased by a minimum of 2 percent annually. Following re-evaluation by the Town of Gardiner, the owner and/or operator of the energy storage system shall have six months to increase the amount of the decommissioning fund as required by the Town, as a necessary condition for continuing operation, or the operating permit may be revoked.

(9) Site plan application. For a Tier 3 Battery Energy Storage System requiring a Special Use Permit, site plan approval shall be required. Any site plan application shall include the following information:

(a) Property lines and physical features, including roads, for the project site.

(b) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.

(c) A three-line electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.

(d) 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.

(e) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system. Such information of the final system installer shall be submitted prior to the issuance of building permit.

(f) Name, address, phone number, and signature of the project Applicant, as well as all the property owners, demonstrating their consent to the application and the use of the participating property for the battery energy storage system.

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

(h) 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 Code Enforcement Officer prior to final inspection and approval and maintained at an approved on-site location.

(i) 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.

(j) 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.

(k) Erosion and sediment control and storm water 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.

(l) Prior to the issuance of the building permit or final approval by the Planning Board and the Building Department but not required as part of the application, engineering documents must be signed and sealed by a NYS Licensed Professional Engineer.

(m) 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 (with appropriate signage) 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] Procedures for inspection and testing of associated alarms, interlocks, and controls.

[3] 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.

[4] 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.

[5] Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

[6] 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.

[7] Other procedures as determined necessary by the Town of Gardiner to provide for the safety of occupants, neighboring properties, and emergency responders.

[8] 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. At a minimum, this shall include all the requirements of the First responder pre-incident plan as described in the Fire Code (currently §1207.13, and as hereafter amended from time to time).

[9] An up-to-date list of response personnel identified in the First responder pre-incident plan, including contact information.

(n) Peer Review Report. A copy of the independent Peer Review Report, as described in the Fire Code (currently §1207.12.2, and as hereafter amended from time to time) must be included.

(10) Special use permit standards.

(a) Setbacks. Tier 3 Battery Energy Storage Systems shall have minimum setbacks of 100 feet from property boundaries.

(b) Height. Tier 3 Battery Energy Storage Systems, as principal structures, shall have a maximum height of 20 feet above average grade. This height limitation shall not apply to any antenna necessary to receive or transmit information relating to the Battery Energy Storage Management System, or to any elevator, stair bulkhead, parapet or railing, water tank, or any similar non-inhabitable structure provided that such structure is firmly attached to the principal structure and covers no more than 10% of the roof area.

(c) Fencing Requirements. Tier 3 Battery Energy Storage Systems, including all mechanical equipment, shall be enclosed by an 8-foot-high fence with a self-locking gate to prevent unauthorized access unless housed in a dedicated-use building and not interfering with ventilation or exhaust ports. All fencing that is required shall be in harmony with the neighborhood character.

(d) Screening and Visibility. Tier 3 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 character of the property and surrounding area and not interfere with ventilation or exhaust ports.

(11) Ownership changes. If the owner of the Tier 3 Battery Energy Storage System changes or the owner of the participating property changes, the special use permit 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 Code Enforcement Officer of such change in ownership or operator within 30 days of the ownership change. A new owner or operator must provide such notification to the Code Enforcement Officer in writing. The special use permit and all other local approvals for the battery energy storage system will be void if a new owner or operator fails to provide written notification to the Code Enforcement Officer in the required timeframe. Reinstatement of a void

special use permit will be subject to the same review and approval processes for new applications under this section.

(12) Permitting fee. The owner of a battery energy storage system shall pay an annual permitting fee to the Town of Gardiner; the permitting fee shall be set annually by the Town of Gardiner.

F. Permitting requirements for Tier 4 Battery Energy Storage Systems. Tier 4 Battery Energy Storage Systems are not permitted in the Town of Gardiner.

G. Safety

(1) System certification. Battery energy storage systems and equipment shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for battery energy storage systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable:

(a) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications),

(b) UL 1642 (Standard for Lithium Batteries),

(c) UL 1741 or UL 62109 (Inverters and Power Converters),

(d) Certified under the applicable electrical, building, and fire prevention codes as required.

(e) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements.

(2) Site access. Battery energy storage systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if a Tier 3 Battery Energy Storage System is located in an ambulance district, the local ambulance corps.

(3) Battery energy storage systems, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.

H. Permit time frame and abandonment

(1) The Special Use Permit and site plan approval for a Tier 3 Battery Energy Storage System shall be valid for a period of 24 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved, as required by the Planning Board, within 24 months after approval, the Town of Gardiner may extend the time to complete construction by 180 days. If the owner and/or operator fails to perform substantial construction after 36 months from issuance of the Special Use Permit and site plan approval, the approvals shall expire.

(2) The battery energy storage system shall be considered abandoned when it ceases to operate consistently for more than six months. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town of Gardiner may, at its discretion, enter the property and utilize the available bond and/or security for the removal of a Tier 3 Battery Energy Storage System and restoration of the site in accordance with the decommissioning plan.

I. Escrow deposits for review and inspection costs. An applicant may be required to deposit an initial sum of money into an escrow account in advance of the review of an application for a special use permit to construct a battery energy storage system. The sums deposited in said escrow account shall be used and administered in accordance with § **220-58A**.

J. Enforcement. Any violation of this battery energy storage section shall be subject to the same civil and criminal penalties provided for in the zoning regulations of Town of Gardiner, including but not limited to the issuance of appearance tickets and imposition of civil penalties by the Town Code Enforcement Officer.